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ABSTRACT

The Architectural and Transportation Barriers Compliance Board was established by Congress in 1973 to ensure compliance with standards prescribed under the Architectural Barriers Act of 1968, which requires federally funded buildings and facilities to be accessible to and usable by physically handicapped persons. This second annual report details the efforts to comply with the law by the nine federal agencies that make up the board. These agencies are the Department of Health, Education, and Welfare; the Department of Transportation; the Department of Housing and Urban Development; the Department of Labor; the Department of Interior; the Department of Defense; the General Services Administration; the United States Postal Service; and the Veterans Administration. The agencies' reports address six major areas: compliance, barrier-related goals and objectives of the agency, environmental barrier-related research activities, legislative and administrative recommendations, consumer involvement, and communications. The report also contains a description of the board's background, planning, and activities. Specific legislative and administrative recommendations in support of the elimination of architectural and transportation barriers are made. The appendices contain excerpts from a number of reports, sections of handbooks, the texts of laws relating to activities of the board, testimony concerning proposed regulations, and agency regulations. (Author/MLF)

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REPORT to the PRESIDENT
and to the
CONGRESS OF THE UNITED STATES

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THE COVER

The first two visitors in wheelchairs ever to enter the Lincoln Memorial under their own power enjoy the view from the chamber. In May 1976 ceremonies conducted by the National Park Service marked the dedication of new ramps and an elevator. The memorial's steps no longer prevent people with physical limitations from seeing at close range the Lincoln statue that has inspired millions since its dedication in 1922.

In his dedicatory remarks, Secretary of the Interior Thomas S. Kleppe said, " . . .more than 100 years after Mr. Lincoln successfully preserved the union, a large segment of the population is still excluded from full participation in our society." Since the Department of the Interior preserves for all Americans the nation's natural and historic heritage, Kleppe stated, "We are determined that all Americans—no matter what their physical limitations—will be able to enjoy it."

At the request of the National Park Service, the Architectural and Transportation Barriers Compliance Board has provided consultation in the design and renovation needed for access to the Lincoln Memorial and other monuments, memorials, and facilities.

REPORT

to the

PRESIDENT

and to the

CONGRESS OF THE UNITED STATES

by the

ARCHITECTURAL AND TRANSPORTATION
BARRIERS COMPLIANCE BOARD
Washington, D.C. 20201

November 1975

PREFACE TO SECOND ANNUAL REPORT

Many handicapped Americans know the 1968 Architectural Barriers Act requires federally funded buildings and facilities to be accessible to and usable by physically handicapped persons. Not many people know Congress established the Architectural and Transportation Barriers Compliance Board in 1973 to ensure compliance with standards prescribed under the Architectural Barriers Act.

This second annual report details the efforts to comply with the law by the nine federal agencies which make up the Board. A look at the contents page will show that the report contains a description of the Board's background, planning, and activities, as well as separate submissions from each agency.

Beyond the detailed material given in this report, it is important to recognize what the report means. It means that the federal government is making progress toward its goal of a barrier-free environment for all Americans.

We trust this report will be used to judge the actions of the Federal government. If these actions are proper and sufficient, that is the way it should be. If not, we hope this report can help form the basis for stronger, more productive legislation and action.

James S. Jeffers
Executive Director
Architectural and Transportation
Barriers Compliance Board

LEGISLATIVE AUTHORITY FOR THIS REPORT

The Rehabilitation Act of 1973, Public Law 93-112, Section 502, paragraph (g), as amended, requires an annual report of the activities of the Architectural and Transportation Barriers Compliance Board and its member agencies for submission to the President and the Congress at the end of each fiscal year.

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I. The Architectural and Transportation Barriers Compliance Board

The second Annual Report of the Architectural and Transportation Barriers Compliance Board is structured to reflect the activities of the Board, its member agencies, and Board staff. It is prepared in such a manner as to provide the President and the Congress with additional insight into the history and function of the Board, as well as specific legislative and administrative recommendations in support of the elimination of architectural and transportation barriers.

Planning and planned activities of the Board staff have been provided to indicate the direction the Board staff intends to take during the coming year. The appendix of the report provides a ready reference for additional information.

A. HISTORY AND FUNCTION OF BOARD

The Architectural and Transportation Barriers Compliance Board was established in Section 502 of the Rehabilitation Act of 1973 (Public Law 93-112) as a quasi-independent agency whose statutory members include the Cabinet level officials of the Department of Health, Education, and Welfare; Transportation; Housing and Urban Development; Labor; Interior; Defense; the General Services Administration; United States Postal Service; and Veterans's Administration. The primary purpose of the Board is to ensure nationwide compliance with the prescribed standards of accessibility developed pursuant to the Architectural Barriers Act of 1968 (Public Law 90-480) as amended by the Act of March 5, 1970 (Public Law 91-205). This Act requires that most buildings and facilities constructed or altered with Federal funds be accessible to, and usable by, handicapped individuals. In carrying out its regulatory responsibilities, the Board is empowered through the Rehabilitation Act Amendments of 1974 (Public Law 93-516) to issue a final and binding order of compliance which may include the suspension or withholding of Federal funds with respect to any building of any department, agency, or instrumentality of the United States subject to the Architectural Barriers Act.

In addition, the Board is responsible for initiating investigatory approaches into the nature of architectural, transportation, and attitudinal barriers confronting handicapped individuals, particularly with respect to public buildings, monuments, parks and parklands, residential and institutional housing. Although the Board staff is in the formative stages of assembling its organizational staff structure, major program activities have been initiated during the past few months. These include, but are not restricted to, the establishment of mechanisms for developing necessary information regarding the environmental needs of disabled individuals, and the design criteria to meet those needs; and the fostering of voluntary compliance with respect to all valid public complaints of noncompliance with current Federal standards of accessibility. Additionally, the Board staff is establishing permanent working relationships with many organizations and groups representing handicapped individuals, and influential in architectural design, engineering, housing research and production, mortgage lending, product manufacturing, transportation planning and services, and others who most impact the development of our physical surroundings.

B. STAFFING

Currently the Board is being served by a staff of eleven persons with two recruit actions pending.

Title	*Entry Date*	*Type of Appointment*
1. Executive Director	March '75	Permanent
2. Compliance Officer	June '75	Permanent
3. Planning and Research Officer	Sept. '75	Permanent
4. General Attorney	Oct. '75	Permanent
5. Public Information Officer	July '75	Permanent
6. Barriers Program Specialist	Nov. '75	Permanent
7. Secretary	April '75	Permanent
8. Clerk-Stenographer	June '75	Permanent
9. Clerk-Typist	June '75	Permanent
10. Editor-Writer	Oct. '75	Temporary–700 hours
11. Clerk-Typist	Oct. '75	Temporary one year
12. Program Specialist	–	Recruiting
13. Program Specialist	–	Recruiting

Manpower Analysis

As part of the early planning process, a "zero-based" manpower analysis was required and conducted by the Department of Health, Education, and Welfare through its Department of Management to assist in identifying needed staff resources (see Appendix G, Part I).

This analysis examined the legislative requirements of the Board and translated these into a series of goals, objectives, and tasks in increasing orders of detail. Following this process from the seventh order through the fourth order a concrete and validated manpower requirement could be established. (In Appendix G, Part II, orders 7 and 6 are reproduced in full, while only excerpts of orders 5 and 4 are provided.) The result of this detailed study revealed that a minimum 43.5 man years are necessary to develop actions necessary to accomplish the legislated requirements of the Board. In addition, this reflects the resources essential for establishing the kind of interdepartmental interface necessary to coordinate within the Federal establishment the broad variety of concerns addressed by the Board staff.

C. STATEMENT OF ORGANIZATION AND PROCEDURE ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD

1. ORGANIZATION AND MEMBERSHIP

A. Name and Organization

The name of this organization is the *Architectural and Transportation Barriers Compliance Board* (hereinafter referred to as the "Board") as provided in Section 502 of the Rehabilitation Act of 1973.

B. Authorization for the Board

The statutory authorization for the Board is Section 502 of the Rehabilitation Act of 1973, as amended by the Rehabilitation Act Amendments of 1974.

C. Officers of the Board

The presiding officers of the Board shall be a Chairman and a Vice Chairman. The Chairman shall be the Secretary of Health, Education, and Welfare, as provided by the Rehabilitation Act Amendments of 1974, or his designee, whose position shall be Executive Level IV or higher. The Vice Chairman shall be elected by the Board and preside in the absence of the Chairman, or if the Chairman should disqualify himself from presiding in a particular case or vacates the chair.

D. Membership

The Board shall be composed of the heads of each of the following departments or agencies (or their designees whose positions are Executive Level IV or higher):

Department of Health, Education and Welfare
Department of Transportation
Department of Housing and Urban Development
Department of Labor
Department of Interior
Department of Defense
General Services Administration
United States Postal Service
Veterans Administration

E. Board Vacancies

If any designated Board member is unable to fulfill his obligations as a member, the head of the department or agency shall notify the Chairman of a redesignation of membership on the Board.

When the position of the normally designated Board member is temporarily vacant, the head of the department or agency may designate the individual acting in that position as an acting Board member.

2. STAFFING

A. The Board's professional and clerical staff will serve under the direction of the Executive Director. The Executive Director, who shall be appointed by the Board, shall report to the Chairman of the Board.

B. The department or agency of each Board member shall make available at the request of the Chairman, such technical, administrative, or other assistance as may be required to carry out the Board's functions.

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3. MEETINGS

Regular meetings of the Board shall be held on the second Tuesday of every other month. Whenever possible, all business shall be transacted at the regular meeting. The Board may elect to convene in executive sessions.

A. Prior Notification

1. A written notice of scheduled Board meetings, a working agenda for the meeting, and a copy of the proposed minutes of the previous meeting (be revised in accordance with Section III E) shall be sent to each Board member, ten (10) work days prior to the meeting. Any member wishing to submit a proposal or issue for Board consideration shall notify the Executive Director in writing at least fifteen (15) work days prior to the date of the meeting for inclusion in the agenda.

2. No policy issue or other matter of significance shall be voted upon by the Board unless it has been previously placed on the proposed agenda for prior review.

B. Attendance

1. If a Board member is unable to attend a regularly scheduled meeting, he shall notify the Executive Director at his earliest convenience.

2. The Board member shall notify the Executive Director if a proxy will attend the meeting in his absence.

3. A list of Board members or proxies and those Board members absent shall become a part of the permanent record through their inclusion in the minutes.

4. In order to maintain an orderly meeting, discussion shall be among Board members and the Executive Director with staff involvement only at their request.

5. Emergency meetings of the Board shall be called by the Chairman to deal with important matters arising between regular meetings which require urgent action by the Board prior to the next regular meeting. Voting and discussion shall be limited to the subject matter which necessitated the call of an emergency meeting. All Board members shall be notified of the time, place, and exact purpose of the emergency meeting a reasonable time in advance.

C. Rules for Board Meetings

Meetings of the Board shall be held in accordance with Robert's Rules of Order, except as otherwise prescribed herein.

D. Voting Procedures

1. Quorum

A quorum shall be the majority (5) of the fixed membership. If a Board member(s) has resigned and a successor(s) has not been named, a majority of the fixed membership shall be required for a decision.

The presiding officer shall not call a meeting to order unless a quorum is present. If at any time during the meeting the chair or a member notices the absence of a quorum, it shall be his duty to declare the fact. However, debate on a question pending may continue after a quorum is no longer present.

In the absence of a quorum the Board members present may elect to recess in order to contact absent members and solicit their attendance and participation at the meeting. The presiding officer shall vote as any other member. Except as prescribed in Section IX, a majority vote of at least a quorum shall be necessary for a decision by the Board.

2. Proxy Voting

In case of a required absence, any Board member shall retain his agency's right to vote by proxy on questions or issues raised in the agenda. Two types of proxy may be used.

a. Directed Proxy

Any Board member who is absent from a regular or an emergency Board meeting may designated a proxy to represent him in discussions of and voting on proposals or issues on the agenda for that meeting, provided the Board member states in writing the name of the proxy designee and how he shall vote.

b. Undirected Proxy

Any Board member who is absent from a regular or emergency Board meeting may designate a proxy to represent him in discussion of and voting on proposals or issues on the agenda and any other items introduced during the course of the meeting, provided the Board member states in writing the name of the undirected proxy, his title, and rank or grade. The undirected proxy shall be the voice and vote of the Board member, and shall be serving or acting in a position which is Executive Level IV or higher.

3. Absentee Ballot

When a directed proxy is unable to vote on a motion to amend a proposal, or to vote on an amended proposal, because his instructions did not anticipate the amendment, the absent member (for whom the directed proxy was intended to vote) shall be afforded an opportunity to cast an absentee vote on the matters on which the directed proxy did not vote.

E. Corrections, Additions, or Approval of Board Minutes

1. Minutes of the previous meeting shall be sent to each Board member within five (5) work days after the meeting. Corrections, additions, or approval of minutes shall be submitted in writing by each Board member to the Executive Director within ten (10) work days after receipt of the minutes.

2. It shall be the duty of the Executive Director to incorporate proposed revisions in the minutes if corrections or additions have been submitted, and present both the original and the corrected minutes to the Board for final approval. The Executive Director shall distribute the approved minutes to the Board for final approval. The Executive Director shall distribute the approved minutes within ten (10) days after approval to: (a) Board members; (b) liaison designees; and (c) the House Education and Labor Committee and Subcommittees, and the chairman and ranking minority leaders of the Senate Labor and Public Welfare Committee and Subcommittees. Minutes shall be made available to others upon request.

4. CORRESPONDENCE, REPORTS, AND RECOMMENDATIONS

A. Correspondence received by the Board which involves a specific department or agency may be referred to that department or agency for reply.

B. The Board shall make to Congress, at the end of each fiscal year, an annual report of the Board's activities during that fiscal year. The annual report shall include such material as it is required by law to include and such other material as the Board may decide. The Board shall, in addition, make to the President and Congress such other reports as it is required by law to make to them, and such recommendations as it considers necessary or desirable to eliminate environmental barriers confronting handicapped individuals. The staff of one or more member agencies may be asked to prepare draft reports or recommendations, or parts of reports or recommendations. No report or recommendation shall be made unless approved by the Board. The Chairman shall, on behalf of the Board, transmit each report or recommendation.

5. PUBLIC HEARINGS

A. Public hearings may be held throughout the country.

The Chairman shall nominate one or more Board members to serve, with their consent, at each hearing. Staff from member agencies may attend as observers.

B. The Board may hold hearings to ascertain compliance of Federally assisted structures under the accessibility standards prescribed pursuant to P.L. 90-480, as amended. Background documentation and investigation shall be the responsibility of the Board staff who shall present their findings and recommendations to the Board. Detailed procedures for compliance hearings shall be established by regulations which will conform with the Administrative Procedure Act (5 U.S.C. 551, *et seq.*).

6. STANDING AND SPECIAL COMMITTEES

The Chairman shall, as necessary and appropriate, appoint standing and special committees comprised of Board members, staff members, or both, to work on special problems and projects relevant to Board functions. Committees shall provide written progress reports to the Chairman who shall, in turn, render a status report to the Board at its regularly scheduled meeting.

7. FISCAL ACCOUNTABILITY

A. It shall be the policy of the Board to allocate funds appropriated by the Congress for such activities as conducting investigations and surveys, initiating public hearings, collecting data on past and current studies, and providing stenographic or other services as required.

B. Board funds shall not substitute for resources an agency should spend for activities under its own research and development or other programmatic or administrative authority. However, the Board may augment current studies by additional funding to ensure a focus for particular information on barriers confronting handicapped individuals.

C. The Executive Director is accountable to the Board for the administration of program expenditures and shall keep records which disclose disposition of any funds and the nature and extent of the Board's activities.

8. AUTHORITY FOR TRAVEL

Each Board member shall obtain travel expenses from his department or agency in the conduct of Board business.

A. Travel expenses for Board staff, consultants, specialists, experts, witnesses, and other persons whose presence is deemed essential for attendance at Board meetings, hearings, advisory committee meetings or other functions of the Board, may be paid by the Board.

B. All travel for Board staff shall be authorized in advance by the Chairman of the Board. This authority may be delegated to the Executive Director.

9. AMENDMENTS TO PROCEDURES MANUAL

In order to adopt and amend the Procedures Manual, a vote of two-thirds of the membership of the Board shall be required.

Approved at the Board meeting 09/16/75

II. Activities of the Architectural and Transportation Barriers Compliance Board

A. HIGHLIGHTS OF ACTIVITIES

The following section includes highlights of the Board staff during FY 1975. These highlights are brief summaries of the major activities in which the Board staff was involved during the year. They are grouped under the general topics of: Bicentennial planning, housing, transportation, GAO report, affirmative action, consumer advisory panel, and research.

1. BICENTENNIAL PLANNING

At the Spring Board meeting of March 1975, Mr. James T. Clarke, Assistant Secretary for Management, Department of Interior, indicated that in an effort to reexamine and supplement existing plans, the Board's staff should comprehensively examine the Bicentennial needs of disabled visitors for the development and modification of new and existing projects.

In response to this Board directive, staff undertook an expansion of the Board's Bicentennial related activities and established contact with related activities and with representatives of the Department of Interior, National Parks Service, and the National Visitor's Center.

In summary, the Bicentennial role of Board staff has been that of a consultant providing advice, guidance, technical assistance and direction whenever requested. Activities included the review and approval of the planned renovations to provide accessibility to and in the Lincoln and Jefferson Memorials; the incorporation of access provisions to the Constitution Gardens; and the identification of needed internal alterations to the Washington Monument. Board staff also provided guidance in removing site and facility barriers to the handicapped in both the White House and Ellipse areas.

Additionally, Board staff contacted the Director of the National Visitors' Center to emphasize the importance of including the necessary accessibility design features into the renovation of the Union Station facility.

Contact was also established and maintained with government and private officials regarding the development of a National Children's Bicentennial Island on Kingman's Island in the Anacostia River near Washington, D.C. The 46-acre tract of land was transferred by the Department of Interior to the District of Columbia specifically for development of a Bicentennial Children's park. The Board staff has been involved in consultation with the D.C. Bicentennial Commission and the architect in the development of this facility to emphasize the importance of total accessibility to the handicapped, and to assist in the identification of deficiencies in meeting this need. Additionally, Board staff worked in association with the Rehabilitation Services Administration to provide advice and guidance to a project underway with the George Washington University to provide a comprehensive Bicentennial Access Guide for disabled visitors. The guide is to provide information relative to the Washington Metropolitan area regarding accessibility and availability of hotels, restaurants, service accommodations, emergency contact points, maps, and related service systems. See Appendix H.

2. HOUSING

One of the major legislative charges given the Board was to "investigate and examine alternative approaches to the . . . barriers confronting handicapped individuals, particularly with respect to . . . residential and institutional housing." In considering the housing needs of handicapped individuals, the Board was instructed to "determine what measures are being taken, especially by public and other nonprofit agencies and groups having an interest in and a capacity to deal with such problems."

"The Board was directed to make the President and Congress a report which shall describe the Board's activities concerning the housing needs of handicapped individuals. These activities were to determine what measures are being taken, especially by public and other non-profit agencies and groups, to make housing available and accessible to handicapped individuals or to meet sheltered housing needs, and to prepare plans and proposals for such further actions as may be necessary to the goals of adequate housing for handicapped individuals, including proposals for bringing together in a cooperative effort, agencies, or organizations, and groups already working toward such goals or whose cooperation is essential to effective and comprehensive action."

In order to make its report, the Board was authorized to conduct investigations and hold public hearings and prepare and submit to Congress and the President plans and proposals for further actions necessary to provide adequate housing for handicapped individuals.

The Board recognized that as a foremost action essential to securing the information sought by Congress and developing the Board's housing program, it was necessary to identify and bring together in a cooperative effort the many agencies, organizations, and groups already working toward housing goals or whose cooperation is essential to effective and comprehensive action. Accordingly, the Board conducted national hearings on housing for handicapped individuals in Chicago, Illinois, on June 9 and 10, 1975.

The Board's objectives in conducting its first national hearing on housing were to: (1) obtain information regarding the views and recommendations from organizations, groups, and individuals representing the handicapped; (2) assess the interrelated aspects of the various services which affect construction; (3) determine the attitudes and trends of the housing industry, both public and private, relative to the needs of handicapped persons; (4) identify and examine problems to the production in adequate amounts of a variety of residential accommodations for severely disabled individuals, and to the provision of satisfactory noninstitutional housing alternatives; (5) identify any conflicts between Federal, State, and local barriers legislation and programs in order to promote and assure consistency of approach and complimentary activities at each level of government; and (6) develop administrative and legislative recommendations relative to the housing needs of disabled persons.

One hundred and thirty organizations, groups, and individuals professing an interest or commitment in removing barriers to the handicapped were invited to attend the hearing and submit written testimony regarding their perception of the housing needs of disabled persons. Individuals representing major consumer organizations with housing related programs and major segments of the housing industry attended the hearing to express their views and experiences, and to identify and explain actions necessary to create desirable living arrangements for handicapped individuals.

The information provided the Board at the hearing carried with it certain key areas of concern and deliberation. Both consumer and industry representatives were largely in accord in their recognition of the social need of housing for the disabled, and in their identification of related policies, programs and activities lacking yet essential to their effective and cooperative action in meeting this need. See Appendix B.

3. TRANSPORTATION

(a) *Air*

An extremely beneficial working relationship has been established between the Board staff and the Airport Operators Council International (AOCI), an organization which represents the governmental bodies that own and operate major airline airports in the United States and on five continents around the world. Presentations were made to their public relations representatives as well as to the entire Council regarding how existing airports can be made accessible to handicapped travelers. The Council has been extremely receptive to the recommendations and suggestions made by Board staff and have cooperated generously.

The AOCI, in cooperation with Board staff, agreed to conduct comprehensive accessibility surveys of all member airport terminals. Board staff assisted the Council in developing and testing an instrument to be used in conducting the survey. AOCI has agreed to supply the information for the preparation of a comprehensive resource book detailing accessibility provisions in the nation's airports.

Board staff prepared comments pursuant to the Federal Aviation Administration's advance Notice of Proposed Rule Making (No. 73-1-16 (38 FR 14757)) Proposed Rules (Document No. 122881, Notice No. 74-75) both of which concerned the air carriage of handicapped persons. The following summarizes comments made to the advance notice.

> It is essential that handicapped individuals be permitted equal use of and access to all facilities designed primarily for public use and accommodations. This would include sources of public conveyance by means of land, water and air transport vehicles. In order that the physically handicapped and mobility limited be permitted to engage in economic, social, and recreation activities in an essentially mobile society, complete and unlimited use of all transport vehicles is paramount.
>
> It was suggested that a "representative" number of handicapped persons be included in a demonstration evacuation prior to determining that they would cause the 90-second period to be exceeded. It was further suggested that rather than limiting by selective categorization those persons with physical/functional disabilities from air travel, that other means be employed in assuring adequate evacuation procedures. Such measures are more functional evacuation design in aircraft and more efficient and intensive training of flight personnel should be initiated prior to consideration of denial of air travel based upon a person's physical and/or functional limitations. Consistent with the Board's general policy, no limitation should be placed on the number and type of handicapped individuals permitted to travel by air transport.

Following issuance of the proposed rules, Board staff made the following comments. The limitations on the number of handicapped persons permitted on a craft based upon the number of exits unduly restricts the number of handicapped persons permitted on a particular flight. The requirement to obtain every six months a physician's statement that the handicapped person can move expeditiously to an emergency exit places an unnecessary burden on the traveler. It also raises the question of the physician's capability of determining the functional ability of a handicapped person to expeditiously move to an emergency exit. The provision regarding seating arrangements for handicapped persons can be interpreted to require that they only be seated immediately adjacent to a window. This provision, therefore, prohibits their use of aisle seats and substantially restricts independent access of handicapped individuals.

(b) *Surface*

A&TBCB staff has functioned in a compliance and consulting capacity with Amtrak officials. Of approximately 435 new cars produced for Amtrak by the Budd Corporation, 20 percent were to be Amcafe (restaurant) cars which were committed by officials to be accessible. Subsequent to public viewing, it was discovered that they were not usable by handicapped persons. Working with Board staff, Amtrak will redesign and renovate the new cafe cars and restrooms so as to provide accessibility. Amtrak officials also indicated they will work to make all stations on the eastern corridor (Washington to Boston) accessible, and include in future grants provisions to ensure accessibility in station facilities.

Board staff also established a continuing relationship with officials of the Metropolitan Atlanta Regional Transportation Authority (MARTA) who are embarking on a program of rapid rail mass transit development which will be responsive to the functional needs of disabled persons. They are utilizing disabled consumers in planning and policy development processes. MARTA agreed to continue working with the Board staff in the development of plans and procedures.

Board staff prepared and submitted comments to the Interstate Commerce Commission regarding the proposed rules entitled, "Interstate Transportation of Passengers by Motor Common Carriers." Following is a summary of those comments:

> The ICC should consider broadening the requirement that terminals be accessibly designed to include facilities, stations, and rest stops. The Board staff offered assistance in the design and review of standards to implement this section. Further, the Board staff recommended that the Commission consider promulgating accessibility provisions relative to ensuring that all new buses be so designed to ensure independent access by the disabled. Such provisions would lessen the need for specialized assistance and services. The recommendations also included an amendment to provide that waivers and exemptions to the ICC accessibility standards be

concurred with the Board. In addition, comments suggested the Commission schedule hearings throughout the country in order to provide appropriate opportunity for consumer comment.

A&TBCB staff prepared comments for the Secretary of Health, Education, and Welfare, to the Urban Mass Transportation Administration (UMTA) on April 11, 1975, pursuant to publication of their proposed regulations governing transportation services for the elderly and handicapped. Such comments were submitted, signed and transmitted by the Secretary of Health, Education, and Welfare. Following is a summary of those comments:

> The comments commended UMTA for its responsive and concerned efforts in addressing the special planning and design requirements of the Urban Mass Transportation Act of 1964. The conditioning of mass transit grant awards upon the demonstration of local planning initiatives in hearing and addressing the special needs of the local citizenry will assist in overcoming the existing inadequacies of traditional transportation planning and design approaches, and assure that disabled users no longer remain anonymous to transportation, planners, and operators.

To assist the Department of Transportation in continuing this effort, the Board staff made, among others, the following recommendations. The definition of "handicapped person" should be revised to the following "any individual who, by reason of illness, injury, age, congenital malfunction, or other permanent or temporary incapacity or disability, including those of wheelchair-users and those with semi-ambulatory capabilities, is unable without the necessary planning and design to utilize mass transportation facilities and services as effectively as persons who are not so affected." Also, some recognition should be made within the recommendations regarding the statutory requirements of P.L. 90-480, or of the provisions of GSA's implementing Federal Property Management Regulation 101.17.1 as amended to 101.19.6. Additionally, the comments recommended that all transportation improvement programs and plans be subject to the approval of the UMTA. In this way, approval of the submitted plans will be more dependent upon their accuracy and responsiveness rather than upon their mere existence. See Appendix I.

4. GAO REPORT

The General Accounting Office, on July 15, 1975, submitted a report to Congress entitled, "Further Action Needed to Make All Public Buildings Accessible to the Physically Handicapped."

The report was principally concerned with actions of the Departments of Health, Education and Welfare; Defense; Housing and Urban Development; and General Services Administration in implementing the Architectural Barriers Act of 1968 (P.L. 90-480).

The report recommended additional legislation by Congress and further action by Federal agencies to correct shortcomings. It also recommended that the Board "coordinate the development of standards by each agency charged with such responsibility to ensure that such standards are adequate to eliminate barriers to the physically handicapped in Federally financed buildings."

As requested by the Comptroller General, the Chairman of the Board submitted a written statement on actions he had taken on GAO's recommendations to the House and Senate Committees on Government Operations. (See Appendix D, beginning on page 13.)

5. AFFIRMATIVE ACTION

(Sections 501, 503, and 504 of the Rehabilitation Act of 1973)

An Architectural Barriers Committee was established by the Interagency Committee on Handicapped Employees under Section 501 of the Rehabilitation Act of 1973. This section deals with the review and development of Federal plans and programs to ensure the adequacy, placement, and advancement practices of handicapped persons. This committee developed for the Interagency Committee administrative and legislative recommendations to ensure Federal responsiveness and maintenance in securing barrier-free employment surroundings. Board staff was involved with the Committee to ensure supportiveness and consistency in action with the Board's program.

In addition Board staff participated in several sessions dealing with the implementation of Sections 503 and 504.

6. CONSUMER ADVISORY PANEL

The Board is mandated under the Rehabilitation Act Amendments of 1974 (P.L. 93-516) to establish a Consumer Advisory Panel. In this regard, the Board staff solicited nominations from all major organizations representing the handicapped, as well as the House Education and Labor Committee and Senate Public Welfare Committee. All nominations were received and proposed members are being identified for nomination by the Chairman of the Architectural and Transportation Barriers Compliance Board and appointment by the Board.

7. RESEARCH

On March 31, 1975, the Board approved a project proposal from the Building Research Advisory Board (BRAB), National Academy of Sciences, for an evaluation and analysis of all current accessibility related design criteria, identification of all standard deficiencies, and development of comprehensive accessibility criteria for Federal agency adoption. The project is being undertaken with the active participation of the Departments of Defense; Housing and Urban Development; Health, Education, and Welfare; General Services Administration; and the Veterans Administration.

Board staff has also participated in a consulting capacity with the Pedestrian Research Laboratory which is working under a grant from the Federal Highway Administration to advise them in a study of the hazards and difficulties handicapped and elderly pedestrians encounter in their daily lives. To be completed by August 1976, the study will provide a "user's guide" as the basis of design to overcome the problems.

B. COMPLAINTS

1. DEVELOPMENT OF COMPLIANCE PROCESSES

In recent months a systematic development of methods to promote and enforce compliance with provisions of the Public Law 90-480 have been undertaken by the Board staff. Initially this process included systematic appraisals of selected Federal alteration construction projects such as the Capitol Mall, the Lincoln Memorial, the Washington Monument, the National Visitor's Center, Metro, and BART.

Realizing that such ad hoc compliance activities only touch the peripheral of the greater compliance issue addressed in P.L. 90-480, the Board staff entered into discussions and negotiations with the F. W. Dodge Division of McGraw-Hill Information Systems Company, experts in the field of construction, research and statistics, for the purpose of designing a system for monitoring and tracking Federal construction projects in order to encourage and assess compliance toward a barrier-free environment for handicapped individuals. It should be noted that F. W. Dodge is uniquely suited for such participation and involvement in the compliance activities of the Board. They maintain a national information retrieval system covering virtually all public and private construction projects. They also possess a computer processing system whereby progress on construction from the initial planning stage through five (5) subsequent stages to project completion are monitored and reported to parties purchasing their service.

To make best use of this information resource, two divisions of the Board staff, the Compliance Division and the Research and Planning Division have initiated a two-phase effort to intensify the compliance activities of the Board.

Phase I. A purchase of service contract is being investigated with the Dodge Corporation to carry out an ongoing search of "high public use" construction projects involving Federal funds in excess of $500,000. From this data Dodge would produce for the Board, a listing of these projects together with mailing labels, for the purpose of providing and/or obtaining information from the project officers or project architects regarding compliance with the Architectural Barriers Act and the application of ANSI standards.

Phase II. A compliance research project is also under consideration with Dodge Corporation. This effort would identify construction activities of the nine member agencies testing various compliance mechanisms such as, "friendly persuasion letters," technical assistance projects, direct intervention, and other means, with identical selected projects, where no specific compliance approach has been utilized. Using such a research design, the research question, "What effect do certain pre-compliance activities have upon ultimate voluntary or involuntary compliance?" can be answered and put to use in future Board compliance activities. In this way minin[illegible] compliance efforts will be able to attain m[illegible] compliance results.

It is realize[illegible]is time that efforts at compliance, alth[illegible] extremely important to the attainment of Board objectives, are severely restricted due to limited staff capacity. Secondly, voluntary compliance (the desired outcome) is dependent upon the dissemination of relevant information to the target population, namely builders, architects, Federal agencies, and the like. Therefore, Board staff will continue to aggressively develop a total compliance approach and thereby achieve the greatest possible compliance with Public Law 90-480 with all available staff resources.

2. SUMMARY OF COMPLAINTS

Following is a summary of complaints processed by the Board staff. Of the complaints received, six were ruled as being outside of Board jurisdiction. Nevertheless, five of these complaints were resolved to the complainants' satisfaction. Only one of the 17 complaints was found to be invalid.

It should be noted that the Board staff has not yet publicly announced that it is accepting complaints. However, it is anticipated that as a result of a comprehensive public awareness campaign which is currently being developed, the volume of activities carried out by the Board staff will increase significantly. In order to expedite and follow up on the increased volume of complaints and inquiries additional personnel will be required.

Complaints Received	17
Complaints Resolved (include no resolution)	9
Complaints Pending Resolution	8

AGENCY	FACILITY	COMPLAINT	RESOLUTION	REMARKS
VA/GSA	VA Regional Office 1520 Market Street St. Louis, Missouri	Lack of Parking for handicapped persons; difficult to get to entrance.	VA contacted city to provide designated spaces on street. Ramped entrance will be signed.	
GSA	The Appraisers Building 630 Sansome Street San Francisco, California	Revolving doors inaccessible; only one of two swinging doors unlocked due to security precautions.	Federal protective service will review doors for easier access.	Invalid complaint. Director, FPS was most accommodating.
WMATA/ Montgomery County, Md.	Grosvenor Station (Washington, D.C. Subway System) Rockville Pike at Grosvenor Lane Rockville, Maryland	Pedestrian underpass, under street, uses two escalators, no elevators.	Pending	Designed; construction has not begun.
U.S. Army/ DoD	New Building Army Logistics Center Fort Lee, Virginia	No elevator access to upper story(s)	Pending	Awaiting confirmation of elevator inclusion in project.

AGENCY	FACILITY	COMPLAINT	RESOLUTION	REMARKS
IRS/GSA	George H. Fallon Building Baltimore, Maryland	Parking space(s) needed for handicapped employee(s)	Pending	
SSA	Southeastern Program Center Social Security Adm. Birmingham, Alabama	Building riddled with violations of Federal standard. Special concern is plush carpeting creating major difficulty for handicapped employee.	Pending	General Counsel, HEW, ruled that the carpet is a barrier and violates intent of P.L. 90-480.
HEW	Donohoe Building Washington, D.C.	Parking space needed for handicapped employee	Pending	
U.S. Navy/ DoD	Post Exchange & Commissary Naval Station San Diego, California	General inaccessibility	Facilities currently comply with Federal Standards	Complaint was unfounded.
U.S.P.S.	U.S. Post Office Prattville, Alabama	Main entrance inaccessible due to steps.	Ramp to loading dock at rear of building. Ramp to main entrance in future planning.	
U.S.P.S./GSA	Post Office Building 200 West Washington Street Marquette, Michigan	Inaccessible building	Pending	
HUD	Student Union Building California State University San Francisco, California	Students who use wheelchairs are unable to find access to certain areas of the building.	Pending	Currently under litigation.
	Apartment Building 3700 Block of 3rd Avenue Manhattan, New York, N.Y.	Public Shopping area inaccessible because of steps.	No resolution.	
	Old Police Building (annex 1) 11th & Dodge Streets Omaha, Nebraska	Steps to entrances make court rooms inaccessible.	Building superintendent will initiate project to provide ramped entrance.	
	Kaiser Foundation Hospital 2025 Morse Avenue Sacramento, California	Main entrance to hospital and pharmacy inaccessible to wheelchairs.	Project initiated to provide automatic main entrance door. FY 1976.	
	Elementary School (New) Paradise, California	2nd Floor Library inaccessible to children in wheelchairs.	Elevator added to project.	
	Texas Tech University Lubbock, Texas	General inaccessibility	Pending	
	The Coffee Tree Restaurant Vacaville, California	Main entrance inaccessible	Plans initiated to provide access from parking area to restaurant.	

C. GRANTS

During the past year, the Architectural and Transportation Barriers Compliance Board awarded one new grant to the Building Research Advisory Board (BRAB), National Academy of Sciences–National Research Council (Project A).

In addition, the Board is co-sponsoring (without funding) with the Office of Developmental Disabilities, Department of Health, Education, and Welfare a project being carried out by the National Association of Housing and Redevelopment Officials (Project B).

Two other projects were completed during the year. The first was being performed by the Gerontological Society (Project C). The other was completed by the American Society of Landscape Architects Foundation (Project D).

1. PROJECT A

Grantor: Architectural & Transportation Barriers Compliance Board

Grantee: National Academy of Sciences—National Research Council, Commission on Sociotechnical Systems, Building Research Advisory Board (BRAB)

Project Title: Program on Building Design Criteria for the Disabled in Federally Owned and Leased Buildings and Facilities

Project Director: *Project Executive*—Mr. Robert M. Dillon, Executive Director, Building Research Advisory Board; and *Project Director*—Mr. Bernard L. Knapp, Business Manager, National Academy of Sciences, Washington, D.C.

Project Period: 4/01/75–3/31/76

Project Site: Washington, D.C.

Funding Level: $145,975 (Through March 31, 1976)

Descriptive Background Information:

The objective of the program will be the development of a long term program on building design criteria for the disabled. The program will address: 1) the identification of deficiencies in buildings and facilities of concern to Federal agencies that prohibit or constrain their appropriate utilization by the disabled; 2) the establishment of recommended functional requirements necessary to overcome the deficiencies, and development of criteria for design operation and maintenance that will address those requirements; 3) the development of mechanisms to facilitate the collection, correlation, and dissemination of the latest information related to environmental accessibility among Federal agencies as well as State and local government agencies and the private sector.

Current Status:

In identifying deficiencies in buildings and facilities, the panel has drawn from the experience and expertise of its members, Federal agencies, disabled individuals, and others in the public and private sectors, as well as from available information and data. Development of recommended functional requirements necessary to overcome the deficiencies is proceeding on the basis of input from these sources.

2. PROJECT B

Grantor: Development Office, Department of Health, Education, and Welfare, Co-Sponsorship: Architectural and Transportation Barriers Compliance Board

Grantee: National Association of Housing and Redevelopment Officials

Project Title: Housing For The Handicapped And The Disabled: A Guide For Local Action

Project Director: *Project Executive*—Ms. Mary K. Nenno, Associate Director, National Association of Housing and Redevelopment Officials; and *Project Director*—Ms. Marie McGuire Thompson, International Center for Social Gerontology, Washington, D.C.

Project Period: 6/30/75–6/30/77

Project Site(s): Washington, D.C. and Four Selected Demonstration Communities

Funding Level: $130,880 (Through June 30, 1976)

Descriptive Background Information:

The basic objective for the project is to develop guidelines for public and private interests in local communities that can serve as a stimulus to the development of housing for the handicapped in non-institutional settings. The end product of the study is a Guidebook containing "how to do it" information ranging from how to assess the local market for such housing, to available resources for assistance, to prototype approaches particular to different sizes and types of communities. In addition, the book will serve as a reference resource for the design, development, and management of housing for the handicapped, utilizing both case studies and bibliographic references to authoritative publications. The book will be distributed to a wide audience of public and private interests.

Current Status:

FIRST OF FOUR WORK TASKS UNDERWAY. Development of information and methodology to identify the local demand for housing in non-institutional settings for the handicapped; identification and abstracting of the available programs of assistance for housing, community facilities, and support services, identification and abstracting some representative experience of alternative housing development types and arrangements that have been developed (or proposed) to meet the special non-institutional housing needs of handicapped persons.

3. PROJECT C

Grantor: Architectural and Transportation Barriers Compliance Board

Grantee: Gerontological Society

Project Title: Residential Environments for the Functionally Handicapped

Project Director: *Project Executive*—Mr. Edwin Kaskowitz, Executive Director, Gerontological Society; *Project Director*—Ms. Andrea Lubershane, Projector Coordinator, Gerontological Society

Project Period: 7/01/74–6/30/75

Project Site: Washington, D.C.

Funding Level: $38,700 (Through June 30, 1975)

Descriptive Background Information:

The project was primarily concerned with collecting, organizing, and evaluating existent information relative to assessing the adequacy of residential environments for the elderly and the handicapped. The product of the project was to be a statement of what is known and what is needed in order to properly assess the adequacy of housing for the elderly and handicapped.

Current Status:

The project period ended June 30, 1975. A reassessment of the original grant proposal in view of grant activities throughout the project period was developed and a supplementary grant proposal requesting an additional $17,136 was submitted for funding. Additional funding was denied.

4. PROJECT D

Grantor: Office of Research and Technology, Department of Housing and Urban Development and the Architectural and Transportation Barriers Compliance Board

Grantee: American Society of Landscape Architects Foundation

Project Title: Access to the Environment

Project Director: *Project Executive*—Mr. Gary O. Robinette, Executive Director, American Society of Landscape Architects Foundation

Project Period: 7/01/74–6/30/75

Project Site: McLean, Virginia

Funding Level: $35,000 (Through June 30, 1975)

Descriptive Background Information:

The purpose of the project was to prepare a compendium on barrier-free site design. The compendium will appear in two parts. The first part will be a compilation of the research performed. The second part will be an extrapolation of the first document, which will be geared to members of the design profession, will consist of graphics, and accompanied by the backup necessary to make those graphics usable.

Current Status:

The project period ended June 30, 1975. A second draft of the first part of the compendium is being developed.

III. Planning and Planned Activities of the Board

A. PLANNING FOR THE YEAR AHEAD

With the advent of initial full time professional staff, Board staff planning activities have been carried out in a more systematic manner and hold promise for full achievement of planned goals for the years ahead. All elements of the Board's staff and member agency liaison personnel have been involved in the processes necessary to develop and implement this plan through which the intents and requirements of the A&TBCB legislation can be fulfilled.

The plan is composed of three major parts: (1) the development of a long range plan; (2) the development of an operational planning system; and (3) the development of project and activity strategies and designs.

The conceptual basis upon which this planning process has been carried out is that the long range plan is a fundamental guide for Board activities for the next six years. From this long range plan, Board staff and member agency liaison staff will develop an operational planning system which will establish specific projects and activities for implementation and planning. This then will constitute the scope of work for the year ahead, including special projects and activities involving grants and contracts or the allocation of specific resources of time, effort, and staff as necessary to complete the assigned work.

1. GOALS

To arrive at this plan, under the direction of the Board's Planning and Research unit, all Board staff functions and member agency liaison units have been participating in the legislative and policy issue analysis necessary to provide the basic tenets upon which a long range plan is based. This activity has been carried over the past months and has resulted in the development of basic goals which provide a structure upon which the entire planning process can be developed and implemented. Broadly stated these goals are:

- To exercise an interagency planning process to structure, coordinate, and track Board member activities.
- To assume coordination role in the development and revision of prescribed standards, to ensure that such standards provide accessibility to and usability of all covered Federal assisted facilities.
- To promulgate such regulations and guidelines as may be necessary to ensure adequate compliance with barrier-free design standards prescribed in accordance with P.L. 90-480, as amended.
- To exercise a system of compliance, including such procedures of compliance as monitoring, investigation, hearings, litigations, and technical assistance, as authorized by statutes and prescribed standards.
- To exercise a system of research to investigate the existence of barriers in attitude and environment, the efforts made to eliminate such barriers, and to plan and propose alternative approaches.
- To carry out a national program of public awareness to promote and facilitate the elimination and prevention of barriers.
- To sustain a Consumer Advisory Panel as a means for providing advice, guidance, and recommendations to the Board concerning its functions.
- To report to the President and Congress such information as required or necessary to detail the progress made in achieving the purposes of the legislation.

2. OBJECTIVES

On the basis of such long range goals, specific objectives can be outlined to include the following considerations:

(1) The development and revision of standards by member agencies authorized to prescribe such standards. Three agencies have this author-

ity: HUD, GSA, and DoD. Presently HUD is in the process of conducting a project at Syracuse University, School of Architecture, to identify the necessary revisions and additions to improve the existing American National Standards Institute's (ANSI) A117.1 standard which pertains to building accessibility by handicapped individuals. The work on this project will continue during the year ahead. A part of the Board's project with the National Academy of Sciences, Building Research Advisory Board, is directed at assessing criteria and standards which exist to assure their adequacy with respect to accomplishing the mission of the Board. In all, to carry out its goal of leadership, the Board staff and member agency units will participate in discussions, deliberations, revisions of existing standards to promote consistency between standards and the avoidance of conflicts. Furthermore, such coordination is intended to assure the broadest possible coverage of conditions applicable to Federally covered facilities, thereby increasing accessibility and usability by handicapped individuals.

(2) The Board administrative staff, working together with other Board member agency personnel during the coming year, will determine what, if any, regulations and guidelines may be necessary to carry out the functions of the Board under P.L. 93-112 as amended and P.L. 90-480 as amended. Furthermore, if it is found that such regulations and guidelines are important in assisting the Board more effectively to fulfill its mission and mandate, coordinated efforts of all member agencies will be used to prepare preliminary drafts for consideration prior to publication.

(3) The compliance activities of Board staff will focus upon the development of a decentralized system whereby primary compliance activities and procedures will be carried out by the member agencies concerned. To facilitate this, work has been initiated to investigate methods to identify projects which comply under this coverage, so that compliance procedures can be set in motion at various critical points in the process. Furthermore, a special compliance research project is being considered, to test what types of early compliance procedures, applied to whom and in what manner will maximize voluntary compliance. Work is also in progress to develop monitoring and investigation techniques to assure full compliance. Even though this work is beginning, it is not expected that these techniques will be fully developed or perfected within the next reporting period. Finally, as an important adjunct to the compliance process, consideration is being given to the development of a technical assistance resource. If initial planning proves this resource to be necessary or advisable, such an effort will be mounted in the year ahead.

(4) Planning and research are important functions related to long range plans as set forth. The planning activities have been previously described and will continue. Projects will be developed as a result of the information accumulated in the planning process. A strategy of research will establish the kinds of research activities which will contribute most of the overall achievement of long range goals. The research unit, working with member agencies will begin to identify member agency projects which will contribute fertile research settings in which to gather information concerning the existence of, and alternative methods for the elimination of environmental and behavioral barriers. Since the fiscal resources of the Board are limited, research and study efforts will be closely allied to and coordinated with member agency activities and resources. At this writing it is too early to describe research activities in detail.

(5) Included in the planning activities is a national educational program designed to increase public awareness and concern as related to the need for elimination of all types of physical and attitudinal barriers throughout the country.

(6) The role and function of the Consumer Advisory Panel, operating under a formalized charter, is planned and carried out as a part of the planning of Board staff to maintain continuity and purposeful participation.

These general rubrics become specific in terms of projects and activities which at this writing are being developed by the Board's staff. Due to limited personnel and fiscal resources the scope of activities emanating from the previously outlined plan will be constrained so that only those activities which are essential and can in fact be realized during the overall six-year plan will be undertaken during the coming years.

IV. Agency Reports to the Architectural and Transportation Barriers Compliance Board—Compliance with Public Law 90–480.

A. METHODOLOGY

In order to achieve consistency in the report format used by each of the nine agencies comprising the Architectural and Transportation Barriers Compliance Board, an outline format encompassing mandates set forth in Public Law 93-112 was developed addressing six major areas: compliance; barrier-related goals and objectives of the agency; environmental barrier-related research activities; legislative and administrative recommendations; consumer involvement; and communications.

Each of the agencies were requested to adhere to the outline format in preparing their reports for inclusion in the second annual report of the Board.

A copy of the memorandum and the detailed outline forwarded to each agency requesting their reports follows.

1. AGENCY MEMORANDUM

To: Agency

From: Executive Director

Subject: Agency Activity Information for the Second Annual Report of the Architectural and Transportation Barriers Compliance Board

The Architectural and Transportation Barriers Compliance Board is currently preparing its second annual report to Congress. The report will include information regarding the activities of A&TBCB, as well as those of its member agencies in support of the Board's mission. In order to accurately and comprehensively reflect the FY '75 activities of the [Agency], the Board respectfully requests the submission of your agency's report by September 15, 1975.

Agency submissions should adhere to the enclosed outline format in order to ensure clarity and continuity of your agency's activities in the Board's report. In this regard, it is emphasized that if action has not been taken in a given section and a complete explanation is not provided for the absence of information, it will be assumed that the [Agency] had no existing or planned policies in that regard, or, as the case may be, has not committed any resources in the cited area. This assumption is necessitated as the information will be used to evaluate activities and policies of the [Agency], which may be reflected in the Board's annual report.

Further, it should be noted that materials submitted for last year's annual report should not be resubmitted. Although previous activities and materials may be alluded to, the report should concentrate upon FY '75 activities. Progress during FY '75 on previously identified but incomplete projects should be noted.

Additionally, it is stressed that any memoranda, publications, correspondence, or other printed materials accompanying the agency reports should be submitted in duplicate (originals or reproductions direct from original copies).

Thank you for your cooperation and efforts in this regard, and your continuing support of the Architectural and Transportation Barriers Compliance Board.

James S. Jeffers

Attachment

2. AGENCY REPORT FORMAT

Agency reports should be prepared using the following format:

I. COMPLIANCE

A. Funding Authority

1. List and briefly describe all agency funding authorities and programs for building or facility construction, leasing, renovation, repair, and alteration:

(i) that *are covered* under the jurisdiction of Public Law 90-480

(ii) that *are not covered* under the jurisdiction of Public Law 90-480

2. State specifically the agency justification for each funding authority not covered under the jurisdiction of Public Law 90-480.

B. Agency Compliance Mechanism for all covered direct and indirect funding activities.

1. What internal procedures exist within the agency's central, regional, and other levels (specify) to ensure compliance with the standards promulgated under Public Law 90-480?

(a) Comprehensively trace in diagram and narrative agency's internal compliance procedures.

(b) Note all internal procedures for compliance review and evaluation; i.e.

pre-preliminary planning
post-preliminary planning
pre-construction
post-construction
post-occupancy

(c) Note all procedural modifications to ensure compliance which have been incorporated at each agency level during FY '75.

(d) Note any internal projects or evaluation studies relating to performance of agency in making facilities accessible.

C. Federal Property Management Regulation (FPMR) 101-19.606 "Record Keeping"

1. What agency activities have been initiated, completed, or planned to comply with the reporting requirements of FPMR 101-19.606:

(i) for covered buildings and facilities constructed, leased, or altered between June 30, 1971 and August 31, 1974?

(ii) for covered buildings and facilities constructed, leased, or altered during the semi-annual reporting requirements (February, August)?

D. Surveys and Investigations

1. Note and describe fully all surveys and investigations undertaken by agency to determine the accessibility of buildings and facilities it occupies, constructs, leases, or alters through agency assistance.

(a) Provide results of survey.

(b) Note followup action taken (if any) as a result of survey findings.

2. Describe fully the agency's system for reviewing, investigating, and responding to complaints regarding barriers to the handicapped in buildings and facilities agency occupied, and constructed, leased, and altered through agency assistance.

E. Waivers and Exemptions

1. Describe fully the agency's procedural policy in reviewing and granting all waiver and modification requests.

(a) Specifically cite agency policy and procedure in support of the A&TBCB April 30, 1974 decision to review and take action on all waivers.

2. Note all waivers and exemptions of the promulgated standards granted during FY '75.

(a) Provide the justification used in each waiver and exemption granted in FY '75.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. Fully describe all existing agency goals, planning objectives, and research and demonstration strategies which relate to environmental barriers to the handicapped (i.e., transportation, recreational, attitudinal, architectural, residential, etc.), and the A&TBCB's objectives shown below.

1. To provide accessible and usable transportation for the handicapped in transportation systems.

2. To encourage the production in adequate amounts of a variety of residential accommodations in the community for the severely disabled, and to provide housing alternatives with the objective of producing the satisfactory non-institutional living arrangements.

3. To promote generally utilization of barrier-free criteria in planning and design of all elements of our man-made environment, and to

require these criteria with respect to that which is Federally assisted.

4. Through a national awareness campaign, to promote the elimination of attitudinal barriers and greater public understanding of environmental problems faced by disabled people.

5. To implement measures which will ensure that all Federal buildings and community facilities such as hospitals, schools, parks, airports, etc., are accessible to and usable by the physically handicapped.

6. To provide access to the handicapped of our National Parks and National Monuments, and to encourage States and localities to take similar action with respect to comparable State and local facilities.

7. To promote a barrier-free environment within business and industry allowing for the employment of the disabled.

8. To undertake the mandated studies on housing and transportation, and to take followup action on findings and recommendations.

9. To promote and develop guidelines for the use of the International Accessibility Symbol on public facilities which comply with Standards under Public Law 90-480.

10. To identify any conflicts between Federal, State, and local barriers legislation and programs and to coordinate future planning.

11. To establish a system of assembling information on barrier removal and to make data available to States and localities.

12. To assure maximum utilization of revised ANSI standards and their evaluation and revision on a systematic and continuing basis.

III. ENVIRONMENTAL BARRIER RELATED RESEARCH ACTIVITIES

A. Identify all agency barrier related research activities (i.e., in-house and outside research, demonstrations, technical assistance, etc.) that were *initiated*, and *completed* during FY '75.

1. Provide in duplicate a summary description of the purpose of each project.

2. Provide a full description regarding the agency's intended use of the project information and findings.

3. Provide in duplicate the final report of each project completed.

B. Discuss progress on any previously reported agency projects which continued through FY '75.

1. Provide duplicate copies of all progress reports.

C. Describe agency mechanisms which currently exist, or are recommended to coordinate barrier-related research activities with the A&TBCB.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. Current

1. Describe FY '74 administrative actions and policies which directly or indirectly affect the agency's compliance, and barrier related activities.

B. Recommendations

1. What legislative and administrative recommendations regarding compliance and barrier related activities would the agency suggest for A&TBCB consideration?

V. CONSUMER INVOLVEMENT

A. Describe the agency procedures for gaining consumer input into the administrative policy decisions relating to environmental barrier activities.

VI. COMMUNICATIONS

A. Note and provide in duplicate all general purpose materials developed by the agency during FY '75 to promote barrier-free concepts (i.e., memoranda, publications, etc.).

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B. AGENCY REPORTS

1. Department of Health, Education, and Welfare
2. Department of Transportation
3. Department of Housing and Urban Development
4. Department of Labor
5. Department of Interior
6. Department of Defense
7. General Services Administration
8. United States Postal Service
9. Veterans Administration

Section 1

Report By The Department Of Health, Education, And Welfare

Office Of Facilities Engineering and Property Management

I. COMPLIANCE

A. *Funding Authority*

1. *Programs covered by P.L. 90-480.* See listing at the beginning of the report.

2. *Programs not covered by P.L. 90-480.* None. All programs are covered.

B. *Agency Compliance Mechanism*

1. *Internal procedures to ensure compliance.* In order to strengthen the existing compliance mechanism described in the First Annual Report, DHEW Technical Handbook 4.12, "Design of Barrier-Free Facilities," was published in final form in January 1975, as a control document to ensure compliance with the minimum requirements of ANSI A117.1 Three thousand copies have been distributed to the Regional Offices of Facilities Engineering and Construction (ROFEC), Department Program activities and private interest. A second edition is now being printed. At the time of publication all Regional Engineers were instructed to complete the check list, found in the handbook, for each project both at the completion of design and again at the completion of construction. Copies of the completed and signed checklists are to be sent to OFEPM headquarters so that the degree of compliance can be monitored for effectiveness. (See section "D" for description of internal evaluation study.)

C. *Record Keeping: Activities regarding reporting requirements*

1. *Facilities built 6/30/71 through 8/31/74.* In an effort to secure the necessary resources to inspect these existing facilities, OFEPM filed an application in June 1975 with the Economic Development Administration (EDA) of the Department of Commerce to fund this project under Title X of the Job Opportunities Program. Unfortunately, the project was not approved for funding by EDA.

Subsequently, OFEPM prepared an FY 77 budgetary request and justification to obtain the necessary funds to contract for inspection of the more than 3,000 facilities built during this period. Resources are not now available to conduct inspections of such an extensive number of facilities.

2. *Facilities built during the semi-annual reporting periods.* On June 3, 1975, OFEPM sent to GSA a summary (in the form of a computer printout) of the status of all projects currently under design or construction. These projects, including both direct Federal and Federally assisted facilities, were checked for compliance with ANSI A117.1, and were certified by the Regional Engineer that the intent was that the projects comply with Public Law 90-480.

OFEPM Manual Chapters 2-135 and 4-01 were issued for the purpose of detailing procedures applicable to Federally assisted and direct Federal activities for the preparation of the ANSI standards check lists during the final design and during final inspection of facilities. It also provides procedures for documentation, reporting, recordkeeping and for requesting waivers and exceptions in accordance with FPMR 101-19.6.

D. *Agency surveys and investigations*

1. *Survey taken.* On September 19, 1974, OFEPM requested all Regional Engineers to conduct surveys of representative completed facilities, including Regional Office Buildings, SSA District Offices, and FDA facilities completed since May, 1970. The results of this sampling showed 67% overall compliance with ANSI A117.1:

Direct Federal Construction 80 buildings–60% compliance
Federally assisted construction 65 buildings–75% compliance

TOTAL 145 buildings–67% compliance

The most commonly found deficiencies were in the following categories:

1.	Telephone (heights, booths)	25% compliance
2.	Identification signs (raised letters)	25% compliance
3.	Warning signals (audible & visual)	33% compliance
4.	Stairs (nosings, handrails)	67% compliance
5.	Elevators (control heights)	68% compliance

6. Restrooms (mirror, towel disp. hts.) 68% compliance
7. Parking lots (unassigned unmarked) 68% compliance

It was evident that the majority of non-complying items could be corrected at relatively little cost. Technical Handbook 4.12 was subsequently published as an aid to be used in making future surveys of this nature.

2. *Systems for handling complaints.* Complaints received at OFEPM headquarters are coordinated with the Regional Engineer with jurisdiction over the project in question. In most cases the complaints are answered at the headquarters level with input provided by the Regional Engineer. Under the new control check list and reporting system OFEPM headquarters will have on file a copy of the check list certifying the degree of compliance for each completed facility. If a discrepancy is found between the complaint and the project check list, the complaint will be referred to the Regional Engineer for investigation.

E. *Waivers and Exemptions*

1. *Policy and Procedure.* OFEPM Technical Bulletin No. 2-4 was issued on July 10, 1975, setting forth policies and procedures for obtaining waivers and exceptions. This procedure is also included in the previously mentioned manual Chapters 2-135 and 4-01. Requests for exceptions are to be submitted to the Office of the Secretary for the review and approval of the Architectural and Transportation Barriers Compliance Board (A&TBCB). Waivers may only be granted with the approval of the Administrator of GSA as specified in FPMR 101-19.6. Requests for exceptions and waivers are to be forwarded by the Regional Office of the Administering Agency to the Director OFEPM, for review. They will then be forwarded to the Chairman, A&TBCB. Waiver requests which are concurred in by the A&TBCB shall be forwarded to the Administrator, GSA for approval.

2. *Waivers and exceptions granted during FY 75* (including justification). No waivers or exceptions using the required FPMR procedures were requested or granted during FY 75.

II. BARRIER-RELATED AGENCY GOALS

A. To ensure that all facilities constructed with DHEW funds or occupied by DHEW, are accessible to and usable by the physically handicapped. (This supports A&TBCB Objectives #3 and #5.)

B. To consult with other Federal agencies and institutions for the purpose of creating quality and uniformity among standards affecting the handicapped. (A&TBCB Objectives #2 and #10.) Examples of current DHEW involvement:

1. Department staff has been serving on committees to review the HUD Minimum Property Standards in accordance with Section 209 of P.L. 93-383.

2. Our staff is currently participating and monitoring a grant made by HUD to Syracuse University for the development of new and more responsive ANSI Standards.

3. Our staff plans to participate in a new study, "Building Design Criteria for the Disabled," initiated by the A&TBCB under contract with the National Research Council of the Building Research Advisory Board.

4. As an ongoing activity, our staff has been working with GSA and the A&TBCB to improve the effectiveness of the reporting system as required by the FPMR.

C. To make the professional design community more aware of barrier-free design and the designer's responsibility for achieving it. (A&TBCB Objectives #3, 4, 5, 9, 11, and 12.)

D. To improve the system within DHEW for monitoring and enforcing compliance with existing regulations governing barrier-free design. (A&TBCB Objectives #5 and 12.)

III. ENVIRONMENTAL BARRIER RELATED RESEARCH ACTIVITIES

None.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. *Current actions and policies*

1. Issuance of Technical Handbook 4.12 as a control document.

2. Emergency Public Works Proposal to survey existing facilities.

3. Summary of GSA of status of all current projects.

4. Issuance of OFEPM Manual Chapters 2-135 and 4-01 giving procedures for reporting, record keeping, waivers and exceptions.

5. Sample survey by Regional Offices of 145 DHEW facilities.

6. Issuance of OFEPM Technical Bulletin No. 2-4 on waivers and exceptions.

B. *Recommendations.* We strongly support any efforts to strengthen, clarify, and unify the existing legislation, regulations, and standards governing facilities for the handicapped.

V. CONSUMER INVOLVEMENT

No procedures have been established or planned by OFEPM for gaining consumer input into administrative policy decisions.

VI. COMMUNICATIONS

A. OFEPM Technical Handbook 4.12, "Design of Barrier-Free Facilities."

B. OFEPM Technical Bulletin 2-4, "Accommodations for the Physically Handicapped."

C. OFEPM Manual Chapters 2-135 and 4-01, "Accessibility of Buildings to the Physically Handicapped."

D. Periodic memoranda and dialogue with Headquarters and Regional staffs to clarify and ensure understanding and accomplishment of objectives.

Administration On Aging

The Administration on Aging administers two formula grant programs, Title III and Title VII of the Older Americans Act, and two discretionary demonstration programs under Section 308 of the Act and Title IV-B of the Act. The relationship between these programs and that of P.L. 90-480 is limited, as none of these programs authorize the construction of facilities (except for Title V of the Act, Multipurpose Senior Centers, for which funds have never been appropriated).

AOA policy regarding transportation is that they encourage State and Area Agencies on Aging to seek capital assistance (for the purchase of vehicles and equipment) from the Department of Transportation or other sources (donations, other Federal programs which provide transportation, etc.) and to limit their transportation expenditures to operating costs, wherever possible. The same policy applies to the discretionary demonstration programs. Since many of the older persons utilizing the specialized transportation provided under the Older Americans Act programs have some degree of mobility limitation, most of the vehicles used to transport participants in these programs have been modified in some way to increase accessibility.

The only AOA research and demonstration activity that relates directly to one of the A&TBCB's objectives (number 8, page 3) is that of transportation; a study and demonstrations are mandated under Section 412 of the Older Americans Act. In response to this mandate, in 1974 the Administration on Aging conducted a major study of the state of the art of transportation for the elderly, and transmitted a report based on the study to Congress in January, 1975. Subsequently, the Commissioner on Aging conducted field hearings based on the major issues raised in the report.

The report included an in-depth discussion of transportation and pedestrian barriers, which impede the mobility of handicapped elderly persons (as well as handicapped persons of all ages). The hearings conducted subsequent to the publication of the report included testimony from older persons with varying degrees of disability (from blindness to inability to walk without supportive devices) regarding their difficulties in utilizing public transportation.

Office Of Child Development

With the passage of the Head Start, Economic Opportunity and Community Partnership Act of 1974 (Public Law 93-644), it became law that at least ten percent of the total number of enrollment opportunities in Head Start programs be made available to handicapped children. High Congressional interest in providing greater priority to children with special needs in Head Start was initially demonstrated in the 1972 Amendments to the Economic Opportunity Act (Public Law 92-424).

In March of 1973 the Office of Child Development issued a notice to all Head Start grantees as a revised part of the Head Start Manual of Policies and Instructions, related to handicapped children (OCD Notice N-30-333-1). This notice deals with general Head Start policy and special procedures and provisions in meeting the needs of handicapped children. With reference to one of the Architectural and Transportation Compliance Board objectives, this notice discusses safety and transportation issues. It assures that adequate safety measures are to be taken for handicapped children, involving, if necessary, the renovation of space and facilities (e.g., ramps for wheelchairs, wall bars, handrails in bathrooms). Adequate provisions of the transportation of these children, including additional adults to serve as attendants and bus supervisors, are also outlined.

The Office of Child Development's most recent efforts to strengthen the quality of services provided to children in Head Start and to bring local programs into compliance with Head Start objectives are reflected in the Performance Standards, published in the *Federal Register* June 30, 1975 and effective July 1, 1975. The standards represent a clear statement of expectations and provide a mechanism whereby local grantees may evaluate their effectiveness in achieving Head Start goals. Referring back to the Compliance Board objective, Section 1304.2-3(13) of the Performance Standards states that "adequate provisions shall be made for handicapped children to ensure their safety and comfort." Grantees and delegate agencies must be in compliance with the standards at the beginning of the grantee's program year following July 1, 1975.

The Performance Standards will be utilized as a means of monitoring the current status of all Head Start programs where handicapped children are in attendance. In this manner, OCD will maintain a check in keeping the facilities free from physical barriers to the handicapped.

In addition, the Office of Child Development, through the Bureau of Head Start, is engaged in an extensive survey of Head Start handicapped efforts. This annual national survey contains a section which deals exclusively with physical facilities, equipment and materials. Questions are asked pertaining to needed modifications or alterations for handicapped children.

Guidelines for use of FY-76 handicapped money are now being developed. High priority will be given needed modifications or alterations for architectural compliance.

Office Of Youth Development

I. COMPLIANCE

A. *Funding Authority*. List and briefly describe all agency funding authorities and programs for building or facility construction, leasing, renovation, repair, and alteration:

(i) that *are covered* under the jurisdiction of Public Law 90-480

(ii) that *are not covered* under the jurisdiction of Public Law 90-480

90-480 covers buildings or facilities that are financed in whole or in part by Federal grant or loan *if* such building or facility is subject to standards for design, construction, or alteration issued under authority of the law authorizing such grant.

While Title III of the Juvenile Justice and Delinquency Prevention Act of 1974, the Runaway Youth Act, does permit the use of Federal funds for acquisition and renovation of runaway facilities, it does not subject these facilities to any design, construction, or alteration standards.

Accordingly, Section 316(a) of Title III (P.L. 93-415) contemplates that part of the Federal share can be utilized for renovation of existing structures. Section 316(a) is implemented by 1351.13 of the Regulations (45 CFR Part 1351), which states:

> "An application for establishing, strengthening or funding a runaway house must provide for temporary shelter to runaway youth and counseling services to both young and their families. Funds may be requested for the acquisition and renovation of existing structures, staff training and the general costs of operating the runaway house. There is no provision for Federal financial participation in the construction of new facilities under this subpart. Federal participation in the cost of acquisition and renovation of existing structures shall not exceed 15 percent of the amount provided in the Federal grant award. Under special circumstances an applicant, on the basis of a demonstrated need, may receive a waiver from the Secretary of this 15 percent limitation."

B. *Agency Compliance Mechanism for All Covered Direct and Indirect Funding Activities*

N/A

C. *Federal Property Management Regulation (FPMR) 101.19.606 "Record Keeping"*

N/A

D. *Surveys and Investigations*

N/A

E. *Waivers and Exemptions*

N/A

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. Fully describe all existing agency goals, planning objectives, and research and demonstration strategies which relate to environmental barriers to the handicapped (i.e., transportation, recreational, attitudinal, architectural, residential, etc.):

N/A

III. ENVIRONMENTAL BARRIER RELATED RESEARCH ACTIVITIES

A. Identify all agency barrier related research activities (i.e., in-house and outside research, demonstrations, technical assistance, etc.) that were *initiated*, and *completed* during FY-75:

N/A

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. OYD will make all of its grantees aware of the existence of P.L. 90-480.

V. CONSUMER INVOLVEMENT

A. Describe the agency procedures for gaining consumer input into the administrative policy decisions relating to environmental barrier activities:

N/A

VI. COMMUNICATIONS

A. Note and provide in duplicate all general purpose materials developed by the agency during FY '75 to promote barrier-free concepts (i.e., memoranda, publications, etc.):

N/A

Rehabilitation Services Administration

I. COMPLIANCE

A. *Funding authorities under P.L. 93-112 "Rehabilitation Act of 1973" subject to the jurisdiction of P.L. 90-480*

1. The following two sections under Titles I and III of the Act authorize RSA to assist public and non-public rehabilitation facilities to construct new free standing buildings and to acquire, expand, remodel, and renovate existing structures:

Title I Construction Sec. 103(b)(2)
Title III Construction Sec. 301(b)

In addition, Title I Section 103(b)(2) provides "Establishment" authority which can do all of the above except new free standing construction. Applicants may acquire, expand, remodel and renovate existing structures only. All of these authorities are focused upon providing adequate facilities for programs providing vocational rehabilitation services to disabled individuals.

B. *Compliance Mechanism.* Title I Construction Sec. 103(b)(2) and Title III Construction must comply with regulations (401.50) which requires meeting the standards of P.L. 90-480. All "establishments" by RSA regulation (401.49) are required to meet these same standards.

Both Title I Construction and Establishment are administered at the State level. The Regional Offices conduct post reviews.

Under Title III Construction, a preconstruction approval of all plans is required. FECA (Federal Engineering Construction Agency of the Department of HEW) monitors compliance with the requirements of P.L. 90-480 as part of the approval process. During the construction phase and prior to final payment, site visits are conducted at periodic intervals (25%, 50%, 75%, and 100% completion) by FECA to verify compliance with P.L. 90-480 and other standards of construction.

C. FECA Reports–Not RSA responsibility.

D. FECA Activity–Not RSA responsibility.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

The removal of environmental barriers which handicap people with disabilities has been a continuing objective of the Rehabilitation Services Administration for a number of years. Legislative planning in 1963 with representatives of national voluntary agencies and professional groups (particularly the National Easter Seal Society, Goodwill Industries of America, the Paralyzed Veterans of America and the President's Committee on Employment of the Handicapped) produced in 1965 Congressional authorization of a National Commission on Architectural Barriers to Rehabilitation of the Handicapped.

Between 1965 and 1968 this ad hoc group developed information about the subject on a nationwide basis, stimulated community and legislative activity to inform and sensitize key groups in the population about the nature and implications of the problem, and helped to overcome resistance to State and Federal legislation on barriers.

Subsequently, the agency co-sponsored and helped to finance information and technical assistance conferences to remove architectural barriers. Examples are the Mobility Section of the National Conference on Rehabilitation of the Disabled and the Disadvantaged in 1969, the Ten City Regional Conferences with the American Institute of Architects in 1970 and the 1974 Houston Conference on Housing and the Disabled.

Through headquarters and Regional staff assistance has been provided on request to university groups, consumer agencies, research and development firms, international agencies and Federal agencies concerned with special aspects of the problem such as accessibility in school buildings, housing and transportation facilities. Staff of the agency currently provide input to interagency efforts such as the Committee on Barrier Free Design of the PCEH, the Transportation Task Force of the United Cerebral Palsy, Inc., the National Center for a Barrier Free Environment and the Women's Committee of the PCEH.

On request the agency has assisted individual members of the Congress and committees of the Senate and House to develop amendments to Federal rehabilitation, transportation and housing legislation to reflect concerns about barriers in the environment. The establishment of the Architectural and Transportation Barriers Compliance Board in P.L. 93-112 in 1973 was an outgrowth of such an emphasis on barriers in rehabilitation legislation.

Another expression of the agency's contribution to elimination of environmental barriers has been helping to support the funding of research and training projects addressing specific aspects of the larger problem. (See Section III of this Report for a resumé of current projects.)

Through its counterpart State rehabilitation agencies, State and Federal funds have been made available on a selective basis to assist in the removal of barriers in places of training and employment of clients of the agencies. By virtue of their leadership in rehabilitation State directors and other agency staff are often represented in State and local community efforts to modify building codes and improve State legislation on environmental barriers.

Several provisions of the Rehabilitation Act of 1973 and 1974 Amendments serve to accelerate and make more specific the attention paid by State-Federal rehabilitation program staffs to the removal of barriers which affect the mobility of people with disabilities.

The Congressional mandate to bring increasing numbers of the more severely disabled into the State-Federal vocational rehabilitation program of services creates a new sense of urgency among many rehabilitation leaders about community action to achieve barrier free work spaces and general accessibility of commercial and community services which disabled people must use to move freely and productively throughout the community as employed rehabilitated individuals. Another impetus to consideration of the problem of barriers was the Congressional requirement in Section 130 of the Rehabilitation Act of 1973 for developing information and recommendations on the comprehensive service needs of the more severely disabled. In addition, Section 101 of the Act and implementing regulations require that State agencies and facilities assisted with funds under Title I must develop and carry out affirmative action plans to hire and advance qualified disabled people in employment in such agencies. Compliance with this provision may well include removing barriers at places of work, installing special equipment, providing other work aids as needed. As a consequence to these activities, it may reasonably be assumed that many more individuals and groups associated with the State-Federal program will be concretely influenced about barrier removal and the ease with which they often can be forestalled.

The Rehabilitation Services Administration's current goal under the OHD planning system is "to provide quality vocational rehabilitation services to eligible handicapped individuals with priority given to the severely handicapped, leading to maximum participation in gainful employment." Subgoal V. Improve the Environment is "to assist public and private agencies to improve the environment of the handicapped so that they may participate more fully in society, contribute as citizens and, to the extent individually possible, become productive in the economy."

While this subgoal expresses the Agency's underlying philosophy and its recognition of the barriers problem in relation to the major objective of the Agency, RSA's limited resources in money and personnel are such that the priority for an extensive action program in barriers removal is not high.

In summary, the RSA's experience clearly indicates that a major effort to coordinate action on barriers removal is necessary at all levels of government, within the public sector, and between the governmental and private sectors. The multiplicity of studies, laws, projects and expressed concerns coming to our attention fully justifies maximum staffing for the Architectural and Transportation Barriers Compliance Board and the suggestion made elsewhere in this report on research coordination. We recommend that the Board establish and provide chairmanship to a standing research or projects committee to monitor, coordinate and help implement research and development efforts, especially those funded by Federal agencies.

III. ENVIRONMENTAL BARRIERS RELATED RESEARCH ACTIVITIES AND TRAINING PROJECTS

Rehabilitation Engineering—The RSA program in Rehabilitation Engineering Research as related to Environmental Barriers has been developing its activity in this area as rapidly as has been possible given the resources available.

A. 1. *Project #23-P-55442 The Rehabilitation Engineering Center—Rancho Los Amigos Hospital as part of the Rehabilitation* Engineering Center system, has been awarded a supplement in FY 1975 to their grant to evaluate, with other REC's in the system at the Moss Rehabilitation Hospital and the Rehabilitation Institute of Chicago, voice actuated environmental control system developed by Scope Electronics of

Reston, Virginia. Particular attention will be paid initially in this evaluation to the utilization of this equipment in vocational settings to allow severely disabled persons to operate complicated (as well as simple) equipment. This equipment will include but not be limited to, computers, telephones, automatic machine equipment, mobility devices (powered wheel chairs, etc.).

It is anticipated that the Scope equipment will have substantial impact toward overcoming many environmental barriers for the very severely disabled by providing these persons the capability to replace lost neuro-muscular functions with voice actuated servo systems to overcome barriers to the action environment which have been created for them by their disability.

If this evaluation project is as successful as preliminary findings indicate it will be, the equipment will be made available to severely disabled persons through the State-Federal VR program and will definitely provide a substantial degree of independence to a large segment of the disabled population who have become completely dependent by reason of their disability.

The first phase of this project is just underway, and deals with the vocational rehabilitation process. A final report on this phase will be due June 30, 1976. Further evaluations of this equipment will be done in the areas of speech pathology as a training device, a communication system for severely dysarthric patients which will produce audible, understandable speech when the Scope device is coupled with a voice synthesisor recently developed.

2. *23-P-55518 The Rehabilitation Engineering Center–Moss Rehabilitation Hospital*–This Center is devoting some of its efforts to overcoming environmental barriers by disabled persons through the utilization of biofeedback techniques to teach these persons how to overcome safely and efficiently problems encountered in their environment with the use of their remaining neuromuscular systems which are difficult to control because of damaged nureal control sources (i.e., stroke, cerebral palsy, muscular dystrophy, etc.). The biofeedback mechanisms utilized in these studies utilize auditory and vibratory senses to guide the disabled person with regard to body position (as a whole or in parts), pressure exerted on tissue hand or foot or both.

Preliminary findings indicate that simple equipment can be designed and fabricated inexpensively to give the neuromuscularly disabled clues as to their own position or action within their immediate environment. These clues can then be utilized by the individual to assist him to overcome the barrier to his planned activity such as curbs, stairs, chairs, etc.

If successful the RSA plans to make these devices available to the disabled population in need of them through the State-Federal program in vocational rehabilitation.

3. *19-P-58030 The Rehabilitation Engineering Center–Egypt*–This Rehabilitation Engineering Center supported by RSA through Special Foreign Currency PL–480 in Egyptian Pounds, has as its primary area of research the Planning for and Design of a Barrier Free Environment in a totally new and comprehensive rehabilitation engineering complex. This Center is to be designed and constructed in the suburbs of Cairo, Egypt. The project is administered by the Ministry of Social Affairs of Egypt, but is cooperative with many other ministries for Human Resources within the government of Egypt, and intentions are to integrate all agencies and factions providing services to the disabled in all of Egypt into one coordinated body. The Faith and Hope Society Rehabilitation Complex will serve as the hub of the system with all other agencies and/or centers acting in a satellite system to feed ideas, problems and solutions centrally so that high quality uniform services can be provided anywhere in the country.

The project involves the development of modern plans for construction and operation of a barrier free environment within the Center for the Faith and Hope. World wide experience is being utilized to plan the Center. During June of 1975 an international conference was held in Cairo under the sponsorship of the project. This conference brought together 45 experts in the fields of rehabilitation, psychology, social work and vocational counseling from throughout the world.

The report of this conference is in preparation at this time, and should provide the basis for sound planning and design criteria for all variety of rehabilitation facilities throughout the world. In fact, participants from 14 countries were there, and all expressed the need in their own countries for such a process as this to continue to expand.

Present plans for the Faith and Hope Center call for a 1000 bed hospital (400 acute and 600 rehabilitation beds), a rehabilitation engineering facility to produce all kinds of patient equipment, vocational training workshops, factories, recreation facilities, housing for 2000 severely disabled patients in the rehabilitation process, model apartment developments especially suited to the severely disabled and their families, an onsite transportation system for the disabled and normals. The entire complex is to be designed to provide a maximum function barrier free environment for the disabled which does not compromise the function of able-bodied staff or families.

Should the project be successful the RSA intends to duplicate solutions to problems of environmental barriers developed by the project within the U.S. for use by the disabled in this country. All solutions adopted will be modified as required to accommodate any differences in life style, etc.

B. None to report.

C. Although there are presently no formal mechanisms within the RSA to coordinate barrier related research activities with the A&TBCB, we have advised A&TBCB personnel of our efforts on an informal basis. It is strongly recommended that a formal interagency research and development committee be established as soon as possible, to describe research programs, develop needs, and review the total research and development effort in the area of environmental barriers. Chairmanship for this committee should be assigned to the Director of the A&TBCB with participation by all agencies working in this or related fields required.

Regional Rehabilitation Research Institute–In FY 1975 one of the research issues developed for the R&D strategy addressed itself to the attitudinal, legal, and recreational barriers facing the disabled. The establishment of a Regional Rehabilitation Research Institute (RRRI) was determined to be an effective vehicle for working on the problem. RRRI conducts research in a core area, in this case barriers, and also provides technical assistance to States in its research area.

RSA's intention to fund an RRRI in barriers was announced in March of 1975. The criteria for selection and guidelines were distributed and 11 universities and research organizations initially applied for the competitive grant. In June the George Washington University was awarded the grant. The review process involved pre-applications and full applications. The reviewers included professional staff from RSA Office of Research, the Regional Office, the Office for Handicapped Individuals and the Architectural and Transportation Barriers Compliance Board.

The results of the research will be used by the Institute in providing technical assistance to States in the Region as well as being made available to all other interested organizations and individuals. Information will be disseminated through Institute publications, and RSA Research Utilization methods. As appropriate, material will be incorporated into training programs as well as public awareness programs. This will be done through RSA related programs as well as others, including the A&TBCB, which has and will continue to be involved in activities of the Institute.

Training Projects–The Rehabilitation Services Administration is currently supporting a training project at East Central State College in Ada, Oklahoma, for the development of training and educational materials relating to the removal of architectural barriers. Designed primarily for use by practicing rehabilitation counselors, the materials cover such areas as "The Rehabilitation Counselor and Architectural Barriers," "Transportation Barriers" and "Legislation." After the materials are developed, they will be available for dissemination to State vocational rehabilitation agencies throughout the country and to other agencies and facilities interested in the removal of architectural and transportation barriers.

The agency has also helped to support the development and distribution of "Into the Mainstream–A Syllabus for a Barrier-Free Environment." This publication was intended primarily for use by architects and other local leaders in the planning design and construction of buildings and spaces disabled people need to enter and use. It is being made available also to a cross section of rehabilitation leadership in the country as a device for sharing current information that will assist groups working to remove barriers.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

Barrier related concerns of this agency are reflected in most elements of the program but on the whole removing barriers had generally been considered somewhat incidental to the major activities of the agency which are to administer Federal funds for basic support services provided through the State-Federal program and other rehabilitation activities authorized under the Rehabilitation Act of 1973 as amended. Accordingly, the agency has not institutionalized or structured its interest or activities in the barriers problem by establishing a special unit or program for this purpose. The Commissioner's office provides a focal point for the development of a general agency stance about the issue and specific activities are undertaken through the Policy Research and Legislation Division and other offices and divisions of the agency as appropriate (i.e., public information, research, training, program operations).

Consideration might be given by this Agency, the Office of Human Development, the Department, and the Architectural and Transportation Barriers Compliance Board to the development of policies and legislation in the following areas:

A. As a specific date in the future (such as the date when revised ANSI standards will be available) *all* Federal activities and State activities and services receiving Federal funds must be housed in structures completely accessible and usable by disabled persons. In the interim, the General Services Administration, the Secretary of HEW and the A&TBCB should issue policy guidance on this topic, preparing all grantees and cooperating State agencies for the more mandatory stance that would be forthcoming.

B. A complementary policy might be the establishment of a requirement that no national, State or Regional conference funded in whole or in part with Federal funds would be held in a place inaccessible to disabled individuals. A part of this policy stance would be prohibiting the participation of Federal employees in conferences held in inaccessible places. Again, sufficient lead time would have to be allowed to permit adjustment to this policy which should be considered at the highest policy levels of government and fully interpreted in advance of its application.

C. A third requirement might be placed on rehabilitation programs and activities, including programs of education of the handicapped, i.e., that State counterpart agencies be required in their State plans, as a condition of receipt of Federal funds to identify an individual or a unit in the State agency responsible for that agency's activities to forestall and remove barriers.

D. A fourth possible recommendation would be strong agency and administration support for funds to carry out the full rehabilitation engineering center program outlined in the Rehabilitation Act of 1973. This would include support for the development of new devices to enable handicapped persons to cope more adequately with the environment.

E. A fifth recommendation is the establishment of an in-house OHD Consumer Advisory Committee on Barriers (and one in each Region) the function of which would be to monitor policy development on barriers and its implementation. In addition, such a group would hold meetings with all agency staff with policy making functions that can result in the creation or removal of barriers in the work environment of people who carry on OHD activities.

V. CONSUMER INVOLVEMENT

When RSA was a constituent agency of the Social and Rehabilitation Service, it was served by such an advisory group of disabled employees. This group advised the Administrator on working conditions faced by disabled people in the HEW South Building, including inaccessible and unusable bathrooms, drinking and telephone facilities. The group also consulted regarding plans for the new HEW South Portal Building, and policy with respect to assignment of scarce parking spaces, and plans for implementation of the $30-40 million proposed renovation of the entire HEW complex (North and South Buildings, Education and Food and Drug Buildings).

The fact that many elements in RSA and other OHD components presently employ people who have disabilities that affect their mobility tends to influence the attitude of the whole staff about the effect of attitudinal and structural barriers.

VI. COMMUNICATIONS

The syllabus "Into the Mainstream—A Syllabus for a Barrier-Free Environment," supported in part by a grant from the agency, is a training and communications device.

Regional Rehabilitation Research Institute on Attitudinal, Legal and Recreational Barriers The George Washington University

The purpose of the RRRI is to conduct research, and provide technical assistance aimed at the removal or reduction of attitudinal, legal and recreational barriers to the disabled.

The RRRI-ALRB, located at The George Washington University in Washington, D.C., will draw upon a large consortium of interrelated and effective resources which will have the greatest impact upon the elimination of barriers to the disabled. Research efforts will be interdisplinary, action-oriented and will be responsive to the important needs of all disabled individuals.

The first year objectives include:

- A comprehensive Literature Search which draws upon existing reports and articles which relate to the attitudinal, legal and recreational barriers to the disabled. A bibliographic annotation of the most outstanding articles will be distributed.
- Implementation of a Barriers Assessment model which will include the initial development of survey instruments and begin to identify representative samples which will provide input on the critical barriers to the disabled.
- A Research Plan and Evaluation System will be developed and implemented which will determine research priorities and assure that an effective interdisciplinary research management plan is instituted.
- A Technical Assistance Strategy will be formulated which will provide a procedure to determine the priorities of the RRRI-ALRB in providing technical assistance to the region.

In addition to the first year objectives, long-range objectives and research topics have been formulated by the research staff. In the second year of operation a Dissemination, Utilization and Feedback Objective will be developed and implemented. Efforts will be made to accomplish the RSA-suggested research efforts in the course of the five year period. Determination of their feasibility and cost-effectiveness will be considered in relation to the over-all developmental research plan and capabilities.

Developmental Disabilities

I. COMPLIANCE

A. *Funding Authority.* The funding authority of Development Disabilities Programs is the "Developmental Disabilities Services and Facilities Construction Act," P.L. 91-517. (Amending legislation is pending.) The Act contains two construction programs:

1. The Community Facilities Program (formula grants) which allows up to 50% of a State's formula grant allotment toward new and existing construction of facilities. Project approval is the responsibility of the Regional Offices.

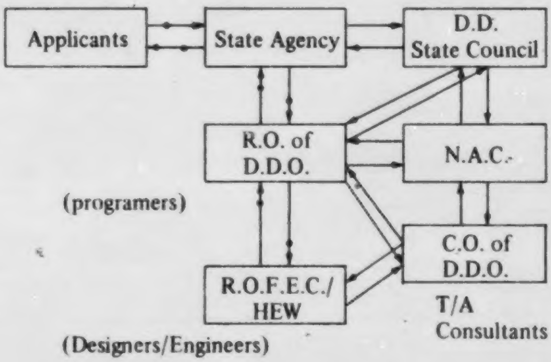
2. The University Affiliated Facilities Program. UAFs are unique centers, based on an interdisciplinary training concept, which provide community services and assist in manpower development throughout the Nation. Project approval is the responsibility of the Regional Offices.

Both construction programs have adopted and promulgated P.L. 90-480.

B. *Agencies Compliance Mechanism For All Covered Direct and Indirect Funding Activities*

1. The project program narrative, schematic drawings and outline specifications are submitted by the applicant to the appropriate State agency. The project must be consistent with the current State plan. If favorably considered, the State agency submits the proposal to the Regional Office-DDO for review, comment, and/or approval. The technical review of the design and construction is the responsibility of the Regional Facilities Engineering and Construction agency, OS, administratively located under the Assistant Secretary for Administration.

(a)



(b) The projects are reviewed and evaluated as many times as deemed necessary at the preliminary, post-preliminary, pre-construction, post-construction, and post-occupancy stages for successful implementation and operation of the project.

(c) The procedural modifications are ensured by the following compliance references and standards:

(1) Standards for Construction and Equipment of Facilities for Persons With Development Disabilities (Regs–Pub. #179)

(2) Design of Barrier-Free Facilities Technical Handbook for Facilities Engineering and Construction Manual

(3) American National Standards, ANSI A.117 1-61 (Rev. 71)

(4) Federal Property Management Regulations 101-19 606

(d) The internal projects and evaluation studies are in draft form at this time and will be submitted as soon as finalized.

C. *Record Keeping.* This is the responsibility of the Regional Office Facilities Engineering and Construction agency.

D. *Surveys and Investigations.* This is the responsibility of the Regional Office Facilities Engineering and Construction agency.

E. *Waivers and Exemptions.* This is the responsibility of the Developmental Disabilities Office and the Regional Office Facilities Engineering and Construction agency.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. The consumers, consumer organizations (advocates) on the national State and community level, the Developmental Disabilities Office agencies on Central office and regional office levels, the National Advisory Council, and the State Advisory Councils, firmly believe that the Secretary's "A" level objective in deinstitutionalization and community alternative solutions must be pursued simultaneously on a "holistic" and "total environmental" basis in order to guarantee success in (a) comprehensive program planning; (b) program development; and (c) program-service delivery systems.

The "holistic" approach encompasses interdisciplinary team efforts and "total environment" constitutes (a) living environment; (b) learning environment; (c) working environment; (d) socialization-activities environment; and (e) transportation services, a mechanism which creates a linkage among the other four environmental factors.

1. Transportation Services is one of the 16 services of Developmental Disabilities programs and is required by the law (statute).

2. Residential accommodations in the community setting are required by the law (statute).

3. In order to promote the utilization of barrier-free criteria in planning and design of our man-made environment, the recipients of DDO funds are urged to adhere to the following: (a) P.L. 90-480; (b) the ANSI standards; (c) the Facilities Engineering and Construction manual (Design of Barrier-Free Facilities); and (d) other available guidelines and publications related to this area.

4. The DDO Central and Regional agencies, consumers, consumer organizations (advocates), National and State Advisory Councils, the President's Committee on Mental Retardation, American Association on Mental Deficiency (a professional interdisciplinary advocate organization), firmly believe that a national awareness campaign is crucial in overcoming the attitudinal barriers, and it is prerequisite in the elimination of barriers in the physical man-made environment. To this end DDO activities in Fiscal Year 1975 were as follows:

(a) The AAMD 10th Annual Architectural Workshop on Environment and Design for the DD/Handicapped, Portland, Oregon, May 18–23, 1975.

(b) The Regional III Mini Workshop–Design for the Disabled, intended primarily for design professionals and students of schools of Environment and Design, held in the American Institute of Architects headquarters, Washington, D.C., May 5, 1975.

(c) The AAMD Region IX Architectural Workshop on Environment and Design for the DD/Handicapped, Silver Spring, Maryland, October, 1975.

(d) The First National Conference on Housing and the Handicapped, sponsored by the Developmental Disabilities Central Office, held in Houston, Texas, September 9–10, 1975.

5. These items are an integral part of the "total environmental" area and we have not treated them as isolated entities.

6. The following studies on housing and transportation were undertaken by DDO:

(a) Effects of Living Environment on the Mentally Retarded, University of Massachusetts–Dr. Friedman

(July '75–June '76) $72,897

(b) Model Legislation for Architectural Barriers, Control and Elimination, Burlington, Vermont

(June '75–June '76) $14,500

(c) Program on Accessible Environment for the Disabled, National Academy of Sciences, Building Research Advisory Board

(2nd year) $142,800

(d) National Center of Transportation for the Handicapped, Auburn University, Alabama (Fed)–Dr. Henry Smith, Project Director

(FY '75) $25,960

7. The international accessibility symbol reinforces "labeling" and "tagging" concepts; it defeats the concept of normalization and total integration (mainstreaming). No effort has been made in this area.

8. To overcome conflicts between Federal, State and local environmental barriers, efforts must be made to (1) change and standardize the model building codes, and (2) adopt one of these as the State and local code. A coordinated and concerned team effort is needed.

9. A national clearinghouse-information center under the auspices of the A&TBCB is an absolute necessity.

10. The revision of ANSI standards is long overdue. DDO will support any creative standards which humanize and normalize the total life of DD/handicapped individuals.

III. ENVIRONMENTAL BARRIER RELATED RESEARCH ACTIVITIES

A. The current research activities of the agency are:

1. (a) *BRAB/NAS* project–program an accessible environment for the disabled; second year funding of three-year project to 1977.

(b) *University of Massachusetts* project–effects of the living environment on the mentally retarded; three-year project to 1977.

(c) *Vermont State Department project*–model legislation for architectural barrier control and elimination; one-year project to 1976.

(d) *National Association of Housing Redevelopment Officials* project–A guide for the Local Action; one year–1976.

2. The findings and recommendations will be submitted to the Secretary for approval and action, as all of the above activities have national significance on behalf of the DD/handicapped.

3. The final reports on the above projects will be submitted to the Secretary as requested.

B. A progress report will be submitted to A&TBCB under separate cover.

C. Since the enactment and establishment of A&TBCB, the Developmental Disabilities Office has coordinated with the Board on every activity related to the physical man-made environment and design, and is planning to continue this policy in the future, recognizing the Board as the coordinating sole source in the Federal Government on barrier-free man-made environment. A few examples are:

(a) BRAB/NAS contracts of DDO and A&TBCB are interrelated and one set of recommendations of one contract will affect the other contract–they are a continuation of one another. The prevailing objectives of A&TBCB and DDO on physical man-made environment are similar if not identical.

(b) The recent National Association of Housing Redevelopment Officials project entitled, "Housing for the Handicapped and Disabled–A Guide for Local Action," has been jointly sponsored by DDO and A&TBCB.

(c) DDO and particularly the Research and Development Division is ready to cooperate with and assist A&TBCB in the area of mutual concern, the physical man-made environment to be responsive to human needs.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. *Current*

At the present time the pending legislation of the "Developmentally Disabled Assistance and Bill of Rights Act" is in its final stage of development and offers some assurance for final approval. At the present time the agency is operating on a "continuing resolution, the Developmental Disabilities Services and Facilities Construction Act of 1970 (P.L. 91-517), as amended.

The Regulation and Construction Standards publication No. 189, enforces the P.L. 90-480 and the ANSI standards of 1961 (R. 1971). The compliance procedure is the responsibility of the Regional Office Facilities Engineering and Construction agency. There is no stipulation in the reporting mechanism, to our knowledge. The pending legislation has promulgated P.L. 90-480 for UAF programs but not for formula grant programs. The regulation and construction standards are requesting that any federally assisted programs shall comply with P.L. 90-480.

B. *Recommendations*

1. That the Department of Agriculture be included as an official Board member.

2. That the title of the Board be changed and broadened. The name, "Architectural and Transportation Barriers Compliance Board," is defeating the "total environment" concept. Architecture is one of the major disciplines in the total physical man-made environment. The urban planners and designers, et cetera, are equally important in the development of barrier-free environment. Even though transportation services is one of the major and crucial services in the field, it is not the only service to overcome environmental barriers. We suggest that the title of the Board read "The Man-made Environmental Barriers Compliance Board." This title encompasses the physical as well as attitudinal barriers. The attitudinal barriers are man-made and the separation of these two are detrimental to the national economy.

3. That the Board be staffed immediately as it is not possible to carry out the load as is presently imposed on A&TBCB. The future expectations of the Nation's handicapped citizens, of their advocate organizations, of the total building industry, and of others from the Board, were clearly demonstrated during the Board's first National Hearing on Housing for the Handicapped, in Chicago, June 9-10, 1975.

4. That the 10 departments and agencies assign their two representatives on programs and design on a permanent basis to the Board, in addition, to the Board's 22 permanent staff.

5. In order to create a national impact on the barrier-free man-made environment and in order to coordinate activities programs, design and construction, it is necessary for the departments and agencies to reaffirm their continued commitment and support of A&TBCB.

V. CONSUMER INVOLVEMENT

The National Advisory Council, the State Advisory Councils, and national organizations, through a coordinate effort, develop recommendations to the Secretary on behalf of developmentally disabled individuals.

VI. COMMUNICATIONS

The communicative process on the National, State, and local level is carried out by the technical assistance project in North Carolina. Agency-level communication is conducted through national conferences, symposiums, consultations, technical assistance, and memoranda, telephone conference calls, et cetera. We feel that there are many conflicting and repetitious publications on this subject and that another one from this agency is not necessary unless a serious research project, intramural or extramural, is performed and tested prior to implementation.

Social Security Administration

SSA is in the process of completing three major building projects (program centers) in the field, and they are currently designing a major expansion of the Headquarters Complex, all with emphasis on barrier-free design for the handicapped. SSA is fulfilling, and will continue to fulfill, their policy of a "barrier-free environment" throughout the Social Security Administration.

The Social Security Administration has even played a "pioneer" role in providing facilities for the handicapped. For example, a recent SSA-funded study of June 28, 1974 (COMPLAN), was incorporated in a Civil Service Commission publication of October 1974, entitled "Guide for Federal Agency Coordinators in Selective Placement of the Handicapped."

I. COMPLIANCE

A. *Funding Authority*

1. (i) In addition to the program centers, we have just completed construction of two SSA district offices in fiscal year 1975–Hot Springs, Arkansas, and Elkhart, Indiana. Both have been inspected and judged free of barriers to the handicapped.

B. *Agency Compliance*

1. We follow the DHEW architectural barriers standards set forth by the Office of Facilities Engineering and Property Management (OFEPM) for our Headquarters, and we utilize Administrative Directives Systems (ADS) Guides, Occupancy Guides and the Federal Property Management Regulations (FPMR) for our field facilities. The DHEW Regional Engineers (ROFEC) are our agents for compliance under sections (a), (b), (c), and (d).

C. Federal Property Management Regulation 101-19.606 "Record Keeping"

D. Surveys and Investigations
None

E. Waivers and Exemptions
None

II. BARRIER-RELATED GOALS AND OBJECTIVES

A. 1. The Social Security Administration provides transportation for the handicapped–a shuttle system and when necessary a special chauffeur.

2. The Social Security Administration encourages and provides assistance in getting the handicapped into housing specially provided for them in Baltimore City (within our commuting area).

3. See "COMPLAN" report.

4. The Social Security Administration talks to organizations, schools, clubs, fund raising groups, and special interest groups on problems of the handicapped on employment and what efforts we (SSA) make to provide jobs. Internally, we run articles in our monthly magazine (OASIS) and in building and management newsletters on any new device or service we encounter that might be helpful to the handicapped.

5. We implement measures only for the buildings we occupy.

6. None.

7. The Social Security Administration is providing, and will continue to provide, a barrier-free environment, encouraging employment of the disabled.

8. Housing for the handicapped is available within our commuting area.

9. The Social Security Administration uses the international symbols for all interior facilities, ramps, and parking areas.

10. The Social Security Administration works and coordinates with the County and Regional Planning Commissions to see that all regulations are adhered to and that we utilize and plan for new techniques.

11. See "COMPLAN" report.

12. See "COMPLAN" report.

III. ENVIRONMENTAL BARRIER RELATED RESEARCH

A. and B. "Design Criteria for Construction of the Computer Center," "Design Criteria for Construction of the Metro West Building," COMPLAN, ADS Guide #24 of June 20, 1975, and page 16 of the Occupancy Guide for SSA District Offices of July, 1971.

C. The Social Security Administration has an Affirmative Action Program that states that we will have a barrier-free environment and that compliance will be the responsibility of the Office of Operating Facilities.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. *Current*

1. It is SSA's policy to provide a barrier-free environment. Ramps have been supplied, curb cuts have been made for wheelchairs, restrooms have been modified and identified for wheelchairs.

B. *Recommendations*

1. We are planning the labeling of elevator controls with Braille and electric sliding doors for our main entrance. We are also considering a textured surface for the blind in the parking areas and our bus loops to avoid danger spots and help in directing people.

V. CONSUMER INVOLVEMENT

A. We are considering the establishment of a committee of handicapped people to advise us (SSA) and other responsible people of the various problems they encountered in our facilities.

VI. COMMUNICATIONS

A. Communications are handled through publications like "COMPLAN" and "Guide for Federal Agency Coordinators in Selective Placement of the Handicapped."

Social And Rehabilitation Service

The Social and Rehabilitation Service has nothing of national significance to report for the Architectural and Transportation Barriers Report.

The only objective that SRS has ongoing at the present time is one to "Make the Mary E. Switzer Memorial Building a functioning example of how an older building can be renovated to provide a barrier-free work place for handicapped persons."

The objective and the action steps involved are below:

Action Steps

1. *Entrances*

A. Install ramps (from street-to-sidewalk and sidewalk-to-entranceways) at the West and East entrances. Ramps are to have heat conduits and rails.

B. Install an automatic door at the East Entrance.

2. *Restrooms*

A. Renovate one restroom to be a model facility to determine what would be required in the remaining restrooms to be renovated. Facilities to be remodeled included lavatories, commodes, soap dispensers, towel dispenser and receptacles, inner doors to be removed, outer doors to be counterweighted, mirrors, and partition extension of existing internal walls.

B. Renovate 20 additional restrooms to conform with the Model Restroom at the ends of the central corridors on each floor (one men's and one women's at each end).

3. *Elevators*

A. Installation of audio-cassettes in automatic elevators in west wing to provide audio-identifications of floors for persons who are blind or have visual impairment.

B. Vertical directions (ascent or descent) will be signaled by a bell for ascent and a buzz for descent.

C. Raised-letter guides will be installed on control panel to identify floor buttons, emergency (alarm) and door open buttons.

D. Floors identified on wall outside (adjacent to) elevator by large, raised numerals.

E. Lift-to-talk telephone (with direct line to Security Office) will be installed in each automatic elevator.

4. *Water Fountains*

A. Lower one water fountain on each floor so that the top of the basin is no more than 33 inches above the floor level.

5. *Parking Facilities*

A. Create four (4), ten foot (10') wide parking spaces to be reserved for severely disabled drivers at each entrance.

B. Each space will be identified by the International Wheelchair Accessibility Symbol.

6. *Offices*

A. Replace all heavy doors with lightweight doors.

B. Replace all office door handles from knobs to lever-action handles.

7. *Emergency Signals*

A. Visual signals will be installed in conjunction with existing audio-alarm systems; to provide adequate warning in emergencies for deaf and hard-of-hearing.

Status

1. *Entrances*

A. Job order submitted to GSA 3/1/74. East Ramp completed September, 1975. The West Ramp however has been further delayed by GSA because the area where the ramp is to be installed is scheduled to be excavated to waterproof the building for the second time. GSA promises to install the ramp as soon as the waterproofing has been completed.

B. Job Order submitted to GSA 3/1/74. Automatic doors were installed in June 1975.

2. *Restrooms*

A. Job Order submitted 3/1/74. However, work was delayed until Model Restroom was completed (4/75). In April 1975, GSA was given the go ahead to have this order started. GSA Design and Construction Division is currently working on final drawings to be included in the contract proposal. GSA has advised us that the contracts will probably not be issued until the 2nd Quarter FY, 1976.

3. *Elevators*

A. Job Order submitted to GSA 3/1/74. No action by GSA on this at all. Correspondence exchanged between SRS Administrator and the Commissioner, Public Building Service, however, no positive response has been received from GSA as of September 5, 1975.

B. Same as Item 3A.

C. Same as Item 3A.

D. Even though this was included in the job order cited in Item 3A, an additional order was submitted to GSA to install the raised numerals after SRS purchased them. This project was completed in March, 1975.

E. Same as Item 3A.

4. *Water Fountains*

A. Job Order submitted to GSA 3/1/74. One water fountain was lowered on each floor with the exception of the fifth floor which has two. This was completed in November 1974.

5. *Parking Facilities*

A. Job Order submitted to GSA 3/1/74. A total of twelve (12) handicapped parking spaces were created in the Switzer Parking Lot in June 1974.

B. Job Order submitted to GSA 3/1/74. Completed June 1974.

6. *Offices*

A. Job Order submitted to GSA 3/1/74. Have been waiting for materials to install several model doors using different methods to determine which would be more appropriate.

B. Same as Item 6A.

7. *Emergency Signals*

A. Job Order submitted to GSA 3/1/74. Completed December 1974.

National Institute Of Education

I. COMPLIANCE

A. *Funding Authority*

(i) NIE's funding authority for fiscal year 1975 was P.L. 93-517. NIE had no specific appropriation authority or programs for building or facility construction, leasing, renovations, repair or alteration.

B. As an agency whose entire physical plant consists of 7 floors of office space in two buildings leased by GSA, the NIE has developed no mechanisms to deal with P.L. 90-480.

Attention will be given at lease renewal time to equipping toilet facilities for use by the handicapped.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

As an educational research agency the Institute has recognized its responsibilities in the area of equal educational opportunities for the handicapped, but no specific programs related to environmental barriers faced by the handicapped have been developed.

Office For Civil Rights

The Office for Civil Rights does not have construction funding authorities or programs and does not have responsibility for assuring barrier-free design and building under P.L. 90-480. However, they are drafting the implementing regulation for Section 504 of the Rehabilitation Act of 1973, as amended, which requires nondiscrimination in Federally assigned programs. The issue of accessibility will be addressed in the regulations.

Section 2

Report
By The
Department of Transportation

Coast Guard Second Annual Report to the Architectural and Transportation Barriers Compliance Board

I. COMPLIANCE

A. Funding authorities are Acquisition, Construction and Improvement (AC&I) Program Appropriation, Alteration and Bridge (A&B) Appropriation, and Operating Expense (OE) Appropriation. All A&B Appropriation projects are covered under Public Law 90-480. AC&I and OE Appropriation projects may fall under covered or non-covered categories depending on its intended purpose. B.1. Internal procedures established to ensure compliance with the requirements of Public Law 90-480 are contained in chapter II-1, paragraph B.5. of the Coast Guard Civil Engineering Manual, CG-251.

B.1. (a)-(b) Checks are made during the following stages or phases of program planning and review to ensure Public Law 90-480 is being complied with:

AC&I Project Proposal Report (pre-preliminary)
"Structalt" Review (post-preliminary)
Conceptual Design (pre-construction)
Invitation for Bid Review (pre-construction)
Post Construction Review (post-construction/occupancy)

B.1. (c) There have been no procedural modifications during FY 75.

No internal projects or evaluation studies relating to performance of Coast Guard in making facilities accessible are underway.

C.1. (i) All Coast Guard Districts and the Headquarters Units were required by Commandant letter 11011 of 22 November 1974 to submit General Services Administration forms 2974 for all projects requiring accommodations for the physically handicapped for the period 30 June 1971 through 31 August 1974.

(ii) Submission of semi-annual reports has been handled in the same manner.

D. Surveys and Investigations

1. No surveys or investigations undertaken to determine accessibility of buildings and facilities occupied, constructed, altered or leased.

2. Agency system for reviewing, investigating and responding to complaints–on receipt of complaint, we will coordinate with field units to obtain data and facts to solve the problem.

E. Waivers and Exemptions

1. Coast Guard policy is to review requests for waiver and if determined having merit, refer to General Services Administration for approval of waiver or modification request. It is the Coast Guard's position that the Architectural and Transportation Barriers Compliance Board (A&TBCB) reviewing authority be limited to:

a. Review of GSA and VA granted waivers to leased space.

b. Being final appeal authority in cases where mutual agreement cannot be reached with GSA concerning applicant agency's waiver or modification request.

2. No waiver and/or exemptions obtained in FY 75.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. None in existence

1. NA
2. Handle on case by case basis as need arises.
3. NA
4. NA
5. NA
6. NA
7. NA
8. NA
9. NA
10. NA
11. NA
12. NA

III. ENVIRONMENTAL BARRIER RELATED RESEARCH ACTIVITIES

A. None
B. NA
C. None

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. Compliance with the Public Law was started prior to FY 75.

B. Delegate blanket authority to each Administrative Agency to grant waivers provided such actions are fully documented and made available to the A&TBCB as needed for purposes of resolving any complaint filed.

V. CONSUMER INVOLVEMENT

A. NA

VI. COMMUNICATIONS

A. None

FAA Policies, Procedures and Programs for the Reduction of Architectural and Transportation Barriers which Impede the Mobility of the Handicapped

I. FUNDING AUTHORITY

Attached are pertinent extracts from Appendix 1, "Public Laws and Authorities Related to Acquisition and Management of Real Property, FAA Real Property Handbook, 4660.1, which set forth FAA's funding authority for building or facility construction, leasing, renovation, repair, and alteration. (Attachment A) It is understood they all fall under the jurisdiction of P.L. 90-480, except for certain technical facilities as defined in Figure 2 of Attachment C.

II. FAA's INTERNAL COMPLIANCE PROCEDURES

A. On June 17, 1970, FAA issued an order (FAA Order 4660.2-Attachment B) which sets forth FAA's policy and procedures for compliance with P.L. 90-480 and Subpart 101-19.6 of the Federal Property Management Regulations. The order also announced the publication of pertinent standards and procedures in Chapter 13 of the Real Property Handbook, 4660.1 (Attachment C).

The order states "It is the policy of FAA that all agency owned or leased buildings . . . which are designed, constructed, or altered, in whole or in part, after 2 September 1969 shall be designed, constructed, or altered in such a manner that they are accessible to, and usable by, the physically handicapped." The order also states that "Whenever feasible, minimum additional modifications may be made to ensure that the physically handicapped have access to those portions of the building that have been modified for their use."

Chapter 13 of the FAA Real Property Handbook (Attachment C) contains the standards and procedures for implementing P.L. 90-480 and FAA policy with respect to making buildings accessible to the physically handicapped. The applicable standards are the American Standard Specifications for Making Buildings and Facilities Accessible to and Usable by the Physically Handicapped. Chapter 13 also establishes: (1) criteria for determining which FAA buildings and facilities are subject to the ANSI Standards; (2) the procedure for exemptions; (3) the procedure for obtaining a waiver from, or modification to, provisions of P.L. 90-480; (4) the type of record keeping required; and (5) criteria for acquiring funds to bring buildings and facilities in line with the ANSI standards.

B. Although there are no provisions for FAA financial assistance for construction of airport terminal buildings, FAA has issued advisory circular AC 150/5200-11, Airport Terminals and the Physically Handicapped (Attachment D) and Airport Medical Design Guide (Attachment D) which provide airport owners and operators with useful information about how to make terminal buildings accessible to the handicapped. These publications have been widely circulated among aviation interests.

C. FY 1975 Procedural Modifications. During the FAA Headquarters staff review of the initial reports furnished by the agency's principal field activities for the period June 30, 1971, through August 31, 1974, several facilities were identified which were not in compliance and for which no prior waivers had been requested. The two regions concerned; i.e. Southern and Alaska, were subsequently advised to either submit formal requests for waivers or to otherwise justify the apparent reasons for non-compliance as appropriate. Based upon recent followup reviews of the semi-annual reports submitted for the period ending August 31, 1975, it now appears that all FAA activities are in full compliance. The FAA agency directive on this subject (Chapter 13, Handbook 4660.1) now requires that all future facilities projects either include facilities for the handicapped in accordance with P.L. 90-480 or that waivers be obtained *prior* to the start of construction when non-compliance is considered justified.

III. RECORD KEEPING

A. To cover the period June 30, 1971, through August 31, 1974, a memorandum directive was sent to all FAA Regions/Centers on October 31, 1974, requiring feeder reports to be submitted in accordance with FPMR 101-19.607.

B. To cover the period September 1, 1974, to August 31, 1975, a memorandum directive was sent to all FAA Regions/Centers on August 20, 1975, requiring feeder reports to be submitted in accordance with FPMR 101-19.607.

C. To assure prompt and accurate reporting in the future, on a semi-annual basis, as required by FPMR 101-19.607, appropriate changes are now being readied for publication in Chapters 12 and 13 of the FAA Real Property Handbook 4660.1.

IV. SURVEYS AND INVESTIGATIONS—NOT APPLICABLE.

V. WAIVERS AND EXEMPTIONS

A. FAA policy and procedures for review and granting of all waiver and modification requests are set forth in Chapter 13, Handbook 4660.1 (Attachment C).

B. Waivers and exemptions granted in FY 1975–None.

VI. COMMUNICATIONS (SEE APPENDIX J)

A. Extract	4660.1
B. Order	4660.2
C. Chapter 13:	4660.1 CHG 8
D. Advisory Circular:	AC NO 150/5200-11

II. BARRIER-RELATED GOALS AND OBJECTIVES

A. *Pedestrian and Highway-Related Accommodations.* Federal Highway Administration (FHWA) Notice N5040.1, March 8, 1974, provides guidance to all field offices and transportation agencies in complying with the requirement of section 228 of the Highway Safety Act of 1973, as amended, that deals with adequate and reasonable access and the safe and convenient movement of physically handicapped persons, including wheelchair users, across curb cuts constructed on or after July 1, 1976, at all pedestrian crosswalks throughout the States.

Standard 12, "Highway Design, Construction and Maintenance," is being completely revised, and will include a provision requiring curb ramps for the handicapped. Target date for issuance is July 1, 1976.

FHWA Notice N5040.12. July 10, 1975, requests that FHWA field offices give consideration to designing pedestrian facilities with ramp grades not steeper than 8.33 percent to provide for the physically handicapped and elderly. This gradient was established by the *American Standard Specifications for Making Buildings and Other Facilities Accessible to, and Usable by, the Physically Handicapped.*

A FHWA bulletin entitled, "1972 Standard Highway Signs Booklet Supplement; MUTCD D9-6, International Symbol of Access for the Handicapped Sign," was issued by the Federal Highway Administration on July [illegible], 1975. The bulletin is designed to promote and develop guidelines for use of the International Accessibility Symbol on public facilities which comply with standards under Public Law 90-480.

B. *Highway Safety Training.* During FY 1975, National Highway Traffic Safety Administration's section 402 funds were used in 20 States for traffic safety education and driver licensing training projects to benefit the mentally or physically handicapped. Projects included the development of K-12 (kindergarten through grade 12) curricula, purchase of drivers simulators and driver range equipment with prosthetic devices for the physically handicapped, and development of audio-visual aids for the deaf and mentally handicapped. Other activities included workshops to train teachers and driver license examiners in the special needs of the handicapped, and the development of appropriate devices, procedures, and guidelines to assist driver license examiners in testing the handicapped.

III. ENVIRONMENTALLY BARRIER-RELATED RESEARCH ACTIVITIES

A. Enhancing mobility for the handicapped is an important objective which the Department of Transportation fully supports. While the overall mission of the Department is to improve transportation for all of the traveling public, the Department is particularly aware of the problems of handicapped citizens, many of whom do not drive, have limited financial resources, and their needs for mobility may not be served by existing means or modes of transportation.

Much of the research and demonstration activity supported by the Department of Transportation is designed to address barriers to travel by the elderly as well as the handicapped. Below is a description of research and demonstration activities supported by the Department during FY 1975. It should be noted that many of these projects are designed to produce data on the types and number of handicapped and elderly persons nationally or in a specific urban area, their corresponding need for transportation services, and the types of transportation options which are appropriate to the identified needs.

- Urban Mass Transportation

— Service and Methods Demonstration Program

One of the objectives of the Urban Mass Transportation Administration's (UMTA) service and methods demonstration program is to sponsor projects which improve mobility for the transit dependent, including the young, the old, the poor, the handicapped, and the elderly. Within recent years, projects addressing this objective have focused on the service needs of the handicapped and elderly. A range of demand-responsive services for the elderly and handicapped has been sponsored in recent years, with currently active projects in Naugatuck Valley, Connecticut, and Cleveland, Ohio. All of these projects use small vehicles, specially modified to accommodate the handicapped, and all the services require pre-registration to establish eligibility for use of the system.

Under the service and methods demonstration program, a major study was initiated in FY 1975 to determine the travel requirements of various classifications of transportation for handicapped persons and to recommend service alternatives which can satisfy these travel requirements. Three contractors have completed Phase I of the project, with the entire project scheduled for completion in the latter half of FY 1975.

UMTA anticipates that at least $2,000,000 will be used in FY 1976 to support demonstration projects designed to test improved services for the handicapped and elderly. Elements of these improved services will include innovative fare collection systems, the use of subscription and demand-responsive services, and the coordination of social service transportation providers with existing public transportation services.

— Research and Development Program

UMTA has supported and continues to support a variety of research and development projects designed to evaluate and alleviate transit-related barriers now frustrating the use of transit systems by handicapped and elderly persons. A brief description of the major research projects follows.

- Development of a new generation of full-size transit buses (Transbus) including the testing and evaluation of prototype buses produced by three manufacturers. The testing phase of the prototypes is complete, which included the demonstration of three types of wheelchair boarding devices. A performance specification and procurement package is now being developed for use by bus manufacturers and UMTA grantees in the purchase of full-size buses.
- Assessment of possible modifications to current production-model transit buses and development of a suitable design to make existing buses accessible to wheelchair travelers. If found to be feasible, the designs will be available for introduction into the manufacture of current bus models.
- Study to inventory and evaluate alternatives to the vertical elevator for use in fixed

transit facilities such as underground rapid rail stations. The study will be used to determine areas for further research to produce equipment that eliminates level-change barriers in transit facilities, and to develop a specification for providing barrier-free circulation in these facilities.

- Catalog search to identify existing on-the-shelf equipment that can be used to provide mobility for handicapped and elderly persons. The report was completed in June 1975 and is available to potential purchases of mass transportation rolling stock requiring special provisions for accommodating the handicapped and elderly.

- Contract to develop a set of recommended subway station designs for specific urban conditions in order to provide guidelines for more economical subway station construction. The objective will be to eliminate construction techniques which disrupt surface transportation and the movement of individuals within the station. Project is scheduled for completion in June 1976.

- Study to inventory information on existing small bus operations and projected operations in the United States and to formulate a performance specification for a small bus to meet the identified travel requirements. The market study will investigate design considerations for the handicapped and elderly to be incorporated into the performance specification. The study is scheduled for completion in April 1976.

- Conduct a market study and formulate a design for a high-capacity (60 to 80 passenger) bus for use in urban transit in the United States. Features for the handicapped and elderly will be incorporated into the final design. If the design is practical, the bus specification will be used by UMTA grantees in purchasing new buses.

- Perform individual assessments of the usage of various transit systems by the handicapped and elderly, including the Airtrans system in the Dallas/Ft. Worth Airport, the Morgantown personal rapid transit system, existing airport and shuttle-loop transit systems, and the Cabinentaxi and other existing foreign advanced guideway transit systems.

- Conduct a cost/benefit study of four hypothetical transit services for the handicapped and elderly, including taxi, dial-a-ride, specially-equipped standard transit bus operated on fixed routes and schedules, and barrier-free rapid rail. Preliminary draft report completed in August 1975.

- Study of vertical circulation problems in transit stations from the point of view of the handicapped and elderly. The project will assess the cost-effectiveness of various devices which eliminate level-changes, and will analyze implementation problems and issues.

- "Mobility of the Handicapped and Elderly" is the subject of a study that was designed to investigate the travel behavior and transportation needs of the orthopedically handicapped and the elderly in the Borough of Queens, New York City. Findings from this recently completed study are to be used in the implementation of transportation improvement programs which are relevant to the requirements of the handicapped and elderly populations.

Demand Responsive Bus Systems

In September 1974 the DOT Technology Sharing Program issued a state-of-the-art document on demand-responsive bus systems. These systems are very effective options to meet the local travel needs of the mobility limited. The document was drafted through the facilities of the Transportation Systems Center's Technology Sharing Program Office and revised based on State and local comments received at a workshop held during June of 1974 in Philadelphia, Pennsylvania. This workshop was cosponsored by the OST Office of R&D Policy and the UMTA Office of Transit Management. Approximately 7000 copies of the document have been requested to date, and queries for further information continue to come in. The workshop sessions were video taped, and a summary overview tape is also being disseminated. A summary document on experience with small bus vehicles is also available.

The Technology Sharing Program has drafted a document on rural passenger transportation, and a similar approach is being used to validate and disseminate this document. The document is currently under review.

- Rural Public Transportation Demonstration

The Federal-Aid Highway Act of 1973 contained provisions permitting the establishment of a Rural Highway Public Transportation Demonstration Program. Regulations prepared by the Urban Mass Transportation Administration and the Federal Highway Administration for implementing this program have been published. Although the program is focused on the mobility needs of the general rural population, each project is being assessed on its capability to serve those with transportation problems, particularly the low income, the handicapped, and the elderly. Projects involving the purchase of rolling stock must, except for compelling reasons shown, include at least one vehicle with wheelchair lift capability.

In September of 1975, the Secretary of Transportation announced a preliminary selection of 45 projects in 31 States to be funded under the first year's appropriation. Actual funding of projects identified will occur after a State agency or Indian tribe satisfactorily completes public notice and hearing requirements. If a second year appropriation is received, program regulations will be reissued and additional projects will be funded."

Use of "Existing Facilities for Transporting Disadvantaged Residents of Rural Area" is the subject of a study that was supported by the Federal Highway Administration. Volume I of this two-volume study is a guide for local governmental officials and developers of rural transportation systems and covers a broad range of alternatives available to improve the mobility of the rural disadvantaged, including the physically handicapped. Volume II is a research report containing detailed information on implementation.

- Intermodal

A Benefit-Cost Analysis of Transportation for the Mobility Limited is the subject of a study initiated during FY 1975 to provide improved information about the benefits and costs of (1) modifying existing and new transportation systems (air, rail, auto, and public mass transportation) to make them accessible to the handicapped and elderly and (2) instituting specialized services to supplement existing systems, including provisions of special private transportation.

IV. ADMINISTRATIVE ACTIONS

A. In July 1974 the Federal Aviation Administration issued a Notice of Proposed Rulemaking (NPRM) leading toward the development of uniform criteria for the carriage of physically handicapped persons by civil air carriers. The NPRM would narrow the definition of handicapped in air transportation to apply only to those persons who need assistance to evacuate the aircraft in an emergency situation. The blind or the deaf would not be regarded as handicapped for the purpose of air transportation and, therefore, could not be denied boarding under this proposal.

The NPRM has been quite controversial and drawn strong opposition from handicapped groups who consider any limitations an infringement of their civil rights. In answer to their objections, the FAA recently conducted evacuation tests using handicapped persons at their medical research facility. These results are presently being analyzed and a decision with respect to the pending NPRM is expected in FY 1976.

B. In February 1975 the Urban Mass Transportation Administration initiated a rulemaking procedure to implement the mandate in section 16 of the UMTA Act, relating to the handicapped, through the establishment of formal requirements applicable to UMTA-assisted planning, capital, and operating projects. A Notice of Proposed Rulemaking was published in the *Federal Register* on February 26, 1975, and followed by a 60-day public comment period. The public comment period was supplemented with six regional public hearings–held in Boston, Chicago, Denver, St. Petersburg, New York, and Kansas City–as well as a hearing held in Washington, D.C. Over three hundred items have been registered in the public docket reserved for this proposed rule, and the written comments combined with the hearing testimony provides UMTA with a significant body of ideas and opinions on how the handicapped should be served by public transportation. The task of reviewing and distilling the information contained in these documents is now underway. UMTA intends to publish the revised draft in the *Federal Register* soon.

The proposed requirements deal primarily with the service and hardware aspects of providing public transportation for the handicapped and elderly. Local transportation planners and operators would be required to identify the travel requirements of elderly and handicapped persons, and to develop specific plans and programs to meet these requirements. The rule would further condition the approval of grants for capital assistance on the development and implementation of such plans and programs. The proposed regulations also would prescribe design standards for mass transportation equipment and facilities in order to diminish the impediments to their use by persons with physical impairments.

- Technical Assistance Activities

In anticipation of the promulgation of the final regulations, UMTA has required that all applications for funding for FY 1976 work programs demonstrate that the work items for developing and/or maintaining a plan and program for transportation improvements include items addressing the transportation needs of the handicapped and elderly. Such work tasks include:

1. An identification of the elderly and handicapped persons to be served, their location within the urbanized area, and the type and number of trips to be provided by public transportation (purpose, time of day, origins and destinations);
2. A description of the public and private resources presently devoted to meeting the transportation needs of the handicapped and elderly persons in the service area;
3. A description of other public and private transportation services currently in the service area and the degree to which they meet the needs of handicapped and elderly persons;
4. A range of alternatives for meeting the perceived transportation needs of the handicapped and elderly; and
5. A recommended plan and schedule for meeting the needs of the handicapped and elderly and the justification for choosing the specific plan and schedule from the alternatives available.

UMTA staff reviews each application for technical studies funds to ensure that such items are being addressed in the transportation planning at the local, regional, and State levels prior to grant approval.

- Capital Assistance

Capital assistance grants awarded under the authority of sections 3 and 5 of the Act can be used for the final engineering, construction, repair, and alteration of fixed facilities. Here again, every application for the construction or renovation of a fixed facility is reviewed to ensure that all appropriate measures are included to permit effective use of the facility by the handicapped.

Semi-annual reports of UMTA-assisted projects incorporating design features for the handicapped are submitted by UMTA to the Assistant Secretary for Administration of the Department for inclusion in the departmental report pursuant to FPMR 101-19.606.

Over $20 million of the section 3 capital assistance funds was awarded in FY 1975 to assist private nonprofit organizations in providing transportation for the handicapped and elderly in those areas where transportation is unavailable or insufficient. This program, authorized under section 16(b)(2) of the Act, completed its first year of funding in FY 1975 and distributed the resource to over 1,032 private nonprofit organizations. Project applications were coordinated by a State agency designated by the Governor for this purpose. These capital assistance funds for private nonprofit service providers are in addition to the capital assistance provided to public transportation operators serving the handicapped and elderly.

- Operating Assistance

Operating funds made available to urbanized areas for transportation services under the authority of section 5 are conditioned upon evidence that the operator has instituted a half-fare program for the handicapped and elderly. This requirement was first implemented in FY 1975 as part of the section 5 formula apportionment grant program established by the National Mass Transportation Assistance Act of 1974.

V. CONSUMER INVOLVEMENT

In connection with its initiative to develop safety criteria for transporting physically handicapped persons on air carriers, the Federal Aviation Administration invited written comments on its NPRM issued in July 1974. In addition FAA held hearings in six cities to allow individuals, organizations, and agencies to present oral and written comments and approximately 200 Congressional inquiries relating to the NPRM.

In connection with its rulemaking procedure on Elderly and Handicapped Transportation Services, the Urban Mass Transportation Administration invited written comments on its NPRM which was published in the February 26 issue of the *Federal Register.* Beginning on April 7, 1975, the Urban Mass Transportation Administration held public hearings in six cities during which time both written and oral testimonies were presented by individuals and representatives of public and private organizations and agencies serving the handicapped. UMTA is presently reviewing several thousand pages of comments in preparation for issuing a final regulation during the fall of 1975.

VI. COMMUNICATIONS

Federal Register
July 5, 1974
Vol. 39, p. 24667

Department of Transportation
Federal Aviation Administration
NEWS, 74-108
July 9, 1974
FAA Proposes New Rule for Air Transportation of Handicapped

Department of Transportation
August 1974
State-of-the-Art Overview Demand-Responsive Transportation

Department of Transportation
Federal Highway Administration
FHWA Highway
FHWA Notice N 5040.12
July 10, 1975
Subject: Ramp Grades on Pedestrian Underpasses and Overpasses

Federal Register
February 26, 1975
Volume 40 Number 39
Part III
Department of Transportation
Urban Mass Transportation Administration
Elderly and Handicapped Transportation Service

Federal Register
March 7, 1975
Volume 40, p. 10697

Section 3

Report By The Department of Housing And Urban Development

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, D. C. 20410

OFFICE OF THE ASSISTANT SECRETARY
FOR ADMINISTRATION

September 15, 1975

IN REPLY REFER TO:

Mr. James S. Jeffers
Executive Director of the
Architectural and Transportation
Barriers Compliance Board
Department of Health, Education & Welfare
330 C Street, S. W.
Washington, D. C. 20201

Dear Mr. Jeffers:

This is in response to your request of August 11, 1975 for a report on HUD's activities in FY'75 in support of the ATBCB's mission.

HUD program activity is reflected in the material submitted as a part of the Housing Report forwarded to you August 15, 1975. (See attached copy.)

With regard to internal property management, HUD, as you are aware, does not have delegated leasing authority, therefore, all of our space is provided by the General Services Administration. The Federal Property Management Regulations Subpart 101-19.6 outlines the requirements for the handicapped (see attached copy). GSA, as a matter of routine, requires facilities for the handicapped in lease locations and new government owned space.

The HUD Headquarters Building, several years ago, was equipped with automatic treadle doors to facilitate ingress and egress for handicapped personnel. Also special bathroom facilities were installed.

Sincerely,

Thomas G Cody
Thomas G. Cody
Assistant Secretary

Attachments

Subpart 101-19.6—Accommodations for the Physically Handicapped

§ 101-19.600 Scope.

This subpart prescribes standards for the design, construction, and alteration of buildings to ensure that physically handicapped persons will have ready access to and use of such buildings and recordkeeping requirements related thereto.

§ 101-19.601 Authority and applicability.

This subpart implements Public Law 90-480, approved August 12, 1968, as amended by Public Law 91-205, approved March 5, 1970. The standards prescribed apply to all Federal agencies and instrumentalities and to non-Federal organizations to the extent provided in the Act.

§ 101-19.602 Definitions.

The following definitions shall apply to this Subpart 101-19.6:

(a) "Building" means any building or facility (other than residential structures; buildings, structures, and facilities of the Department of Defense; and any other building or facility on a military reservation designed and constructed primarily for use by able-bodied military personnel) the intended use for which will require either that such building or facility be accessible to the public or may result in the employment therein of physically handicapped persons, which is to be:

(1) Constructed or altered by or on behalf of the United States;

(2) Leased in whole or in part by the United States after August 12, 1968, if constructed or altered in accordance with plans and specifications of the United States;

(3) Financed in whole or in part by a grant or a loan made by the United States after August 12, 1968, if the building or facility is subject to standards for design, construction, or alteration issued under authority of the law authorizing such a grant or loan; or

(4) Constructed under authority of the National Capital Transportation Act of 1960, the National Capital Transportation Act of 1965, or title III of the Washington Metropolitan Area Transit Regulation Compact.

(b) "Alteration" means repairing, improving, remodeling, extending, or otherwise changing a building.

§ 101-19.603 Standards.

Except as otherwise provided in § 101-19.604, every building designed, constructed, or altered after September 2, 1969, shall be designed, constructed, or altered in accordance with the minimum standards in the "American Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, Number A117.1—R 1971," approved by the American Standards Association, Inc. (subsequently changed to American National Standards Institute, Inc.).

§ 101-19.604 Exceptions.

The standards established in § 101-19.603 shall not apply to:

(a) The design, construction, or alteration of any portion of a building which need not, because of its intended use, be made accessible to, or usable by, the public or by physically handicapped persons;

(b) The alteration of an existing building if the alteration does not involve the installation of, or work on, existing stairs, doors, elevators, toilets, entrances, drinking fountains, floors, telephone locations, curbs, parking areas, or any other facilities susceptible of installation or improvements to accommodate the physically handicapped;

(c) The alteration of an existing building, or of such portions thereof, to which application of the standards is not structurally possible; and

(d) The construction or alteration of a building for which plans and specifications were completed or substantially completed on or before September 2, 1969,

provided, however, that any building defined in § 101-19.602(a)(4) shall be designed, constructed, or altered in accordance with the standards prescribed in § 101-19.603 regardless of design status or bid solicitation as of September 2, 1969.

§ 101-19.605 Waiver or modification of standards.

The applicability of the standards set forth in this subpart may be modified or waived on a case-by-case basis upon application to GSA by the head of the department, agency, or instrumentality of the United States concerned only if the Administrator of General Services determines that such waiver or modification is clearly necessary.

§ 101-19.606 Recordkeeping.

The administering agency's file on each contract or grant for the design, construction, or alteration of a building as defined in § 101-19.602 shall be documented with a statement either: (a) that the standards are applicable to and have been or will be incorporated in the design, the construction, or the alteration, as the case may be; (b) that the grant has been or will be made subject to a requirement that the standards will be incorporated in the design, the construction, or the alteration, as the case may be; (c) that the standards have been waived by the Administrator of General Services (in which event the justification for waiver shall be stated); (d) that the project is within one of the exceptions set out in § 101-19.604 (the specific exception being identified); or (e) such other statements as may be appropriate with respect to application of the standards to the contract or grant. The head of each agency shall be responsible for implementing the file documentation requirement by regulation or other appropriate means. The documentation shall be made available to the Administrator of General Services upon request.

§ 101-19.607 Reporting.

(a) Every 6 months, each administering agency shall prepare and submit to the Administrator of General Services a report covering all projects subject to the requirements of this Subpart 101-19.6 for which funds have been appropriated or for which a contract, grant, or loan has been approved (whichever is applicable) and which are still under design or construction. Once a project has been reported as being occupied, it need not be included in subsequent reports. Reports should be prepared on GSA Form 2974, Status Report For Federally Funded or Leased Buildings—Accommodation of Physically Handicapped. This report has been cleared in accordance with FPMR 101-11.11 and assigned interagency report control number 0031-GSA-SA.

(b) The semiannual reporting periods, for purposes of this requirement, end on the last day of February and August. Reports will be due on the fifteenth calendar day of the following month. The initial report will cover all facilities subject to this reporting requirement during the period from June 30, 1971, through August 31, 1974.

(c) Reports will be used for surveys and investigations to insure compliance with Public Law 90-480, as amended, pursuant to the requirements of the Act.

1. The Department of Housing and Urban Development

The Department administers a number of programs which can provide housing and other benefits for the elderly and handicapped. Chief among these are:

- Section 202 of the Housing Act of 1959, as amended by the Housing and Community Development Act of 1974 (HCDA of 1974);
- Section 8 of the United States Housing Act of 1937;
- Title I of the HCDA of 1974;
- Section 701 of the Housing Act of 1954, as amended by the HCDA of 1974; and
- The HUD research authority contained in Title V of the Housing and Urban Development Act of 1970, as amended by the HCDA of 1974.

There follows a brief description of each of these programs, as well as a detailed description of efforts undertaken by the Department to develop housing designed in whole or in part for handicapped persons and HUD research activities in this area.

Section 202 of the Housing Act of 1959

Direct Federal loans under section 202 are available to nonprofit corporations and nonprofit cooperatives for housing projects specially designed for the elderly and handicapped. A set aside of section 8 contract authority is available for these section 202 units.

For purposes of the revised section 202 program, a person is considered handicapped if he is determined, pursuant to regulations issued by the Secretary, to have an impairment which (a) is expected to be of long-continued and indefinite duration, (b) substantially impedes his ability to live independently, and (c) is of such a nature that the ability to live independently could be improved by more suitable housing conditions. A person is also considered handicapped if he is a developmentally disabled individual as defined in section 102(a)(5) of the Developmental Disabilities Services and Facilities Construction Amendments of 1970.

Section 8 of the United States Housing Act of 1937

The new section 8 Housing Assistance Payments Program for Lower-Income Families offers a vehicle for assisting individuals, including elderly and handicapped persons, who cannot afford decent housing on the private market. Projects may be financed by FHA-insured loans or any other method of financing, with Section 8 assistance being provided on behalf of eligible lower-income persons and families through assistance payments contracts with the housing owners. Section 8 payments may be made with respect to projects which are designed in whole or in part for occupancy by the elderly and handicapped.

Section 231 of the National Housing Act

Nonprofit, profit-motivated groups and public agencies may sponsor the construction or rehabilitation of specially designed rental housing for the elderly or handicapped under section 231 of the National Housing Act. This program provides for Federal insurance of project mortgages within interest ceilings set by HUD. Section 231 uses the same definition of handicapped person as that described above in connection with the section 202 program.

Community Development Block Grant Program (CDBG)

The CDBG Program, authorized by Title I of the HCDA of 1974, consolidated several existing categorical programs for community development, including Open Space Land grants, Public Facility loans, Water and Sewer and Neighborhood Facilities grants, Urban Renewal and Model Cities grants and Rehabilitation loans. Funds under the program are made available to units of general local government upon application and may be expended for a wide range of community development activities. The program is designed to accord a maximum amount of freedom to local officials in the formulation and execution of community development programs, with a minimum of Federal review.

There are several features of the program which are of special interest to the handicapped. For example a number of the activities for which CDBG funds can be expended may benefit handicapped persons. In this regard, section 105(a)(5) of the block grant statute makes the undertaking of special projects to remove material and architectural barriers which restrict the mobility and accessibility of elderly and handicapped persons an eligible activity. Funds may also be used for acquiring housing sites, including housing for the handicapped; for rehabilitation financing, including funds for handicapped homeowners; for code enforcement projects to upgrade housing. In addition, a wide variety of public works facilities may be of benefit to handicapped persons, including senior centers neighborhood facilities and recreational and park facilities.

In order to receive CDBG funds an applicant must comply with certain requirements. Below are some of the requirements which may be of particular concern to the handicapped.

Applicants must prepare a community development plan summary, program and budget to determine needs, goals, and objectives. The plan must identify community development needs of the entire community, including the handicapped. A Housing Assistance Plan "HAP" must be submitted which (a) surveys the condition of existing housing in the community and assesses the needs of lower-income persons (including elderly and handicapped persons, large families, and persons displaced or to be displaced) residing in or expect to reside in the community, (b) states "a realistic annual goal for the number of dwelling units or persons to be assisted" and (c) specifies the locations by census tract of the proposed housing for lower-income persons.

A citizen participation plan must be developed for all segments of the community. The Act requires the applicant to furnish assurance that (a) citizens will receive adequate information about the program, (b) public hearings will be held to obtain the views of citizens and (c) opportunities are permitted for the citizens to participate in the development of the application. Handicapped citizens may in this way articulate needs, express activity preferences and assist in selecting priorities for the plan and program. They may also assist in program implementation by monitoring activities related to their interests and by employment in the program and involvement in its evaluation. Although final determination on the use of the funds is the sole responsibility of the recipient, the recommendations of citizens must be taken into account.

Environmental review and relocation requirements as they apply to the new Act, do not focus on specific population groups. However, as with other displacees, "last resort housing" may be used for handicapped displacees if no other appropriate housing is available for them in the relocation process.

In addition to entitlement grants, funds are available to communities at the discretion of the Secretary for community development activities. As a general matter these funds may also be used to serve the handicapped. For example, while not specifically for them, the discretionary funds allocated to new communities may be used for projects meeting the needs of handicapped persons.

Discretionary funds are also available for innovative projects which encompass a concept, system, or procedure that is unique, advance the state of the community development art and have the potential for transferability, based on priority areas of national significance established each year by HUD.

The impact of the CDBG on helping meet the needs of the handicapped will be further analyzed as more experience with this new program is developed.

Section 701 Program

The section 701 program is designed to facilitate comprehensive planning for urban and rural development and to assist State and local governments to establish and improve planning staffs and techniques on an areawide basis. Eligible recipients include: States for Statewide planning and assistance to sub-State applicants applying to the States; large cities, urban counties, metropolitan clearinghouses, councils of government, Indian tribal bodies, and other governmental applicants with special planning needs that cannot otherwise be met.

Recipients are required to carry out an ongoing comprehensive planning process involving citizens and to develop a comprehensive plan which includes, as a minimum, a housing element and a land use element. The plan should address the needs of all citizens including the elderly and handicapped. Both elements must specify goals and measurable annual objectives, programs to accomplish the objectives and program evaluation criteria. In addition, land use policies must be coordinated at all governmental levels and functional planning must be integrated with comprehensive planning.

Activities which may be undertaken under Title IV include: natural resource planning; planning for physical land use facilities and service delivery systems including health, recreation, education, culture, transportation, utilities, fire protection, police; economic development planning including employment; equal opportunity planning, financial planning, evaluation and research.

The extent of citizen involvement is determined by the applicant according to its level of government and the nature of the activity under consideration, but the applicant must include a statement of the extent of citizen interaction in initiating as well as in responding to proposals, the extent of access to the decision-making process (i.e., involvement where major plans, policies and priorities or objectives are being determined). But citizen involvement does not require citizen concurrence in final determinations. The latter is the sole responsibility of the applicant.

Although the program serves all Americans, nothing in the statute is geared specifically toward the handicapped, nor is the administrative focus of the program in this direction. Because 701 grants are relatively small, there is less likelihood that a recipient will be able to study the needs of any special group in depth after meeting its mandatory comprehensive planning requirements, but, at the same time, this possibility is not precluded.

HUD Research Authority

Title V of the Housing and Urban Development Act of 1970 contains the Department's general research authority. Of special importance to the elderly and handicapped is the amendment which section 815 of the HCDA of 1974 made to Title V. This provision authorizes HUD to undertake special demonstrations to determine the housing design, housing structure, and housing-related facilities and amenities best suited to meet the needs of groups with special housing needs, including the "elderly and handicapped."

Housing the Handicapped Under the Various HUD Programs

Thus far, HUD has helped develop eight buildings designed wholly or in part for occupancy by handicapped or disabled persons. The lessons learned from their construction and operation can contribute meaningfully to accomplishment and progress in this field.

Vistula Manor. The first of the public housing for handicapped people was developed in Toledo, Ohio, Vistula Manor, with 164 units, opened in 1967, was intended to be occupied half by the handicapped, the remainder for the elderly. When it opened, only 17 units, or ten percent, were occupied by handicapped. Since then the percentage has risen about 2 percent per year, so that even today fewer than 30 percent of occupants are handicapped. The building borrowed from designs of Dr. Howard Rusk's Rehabilitation Institute of New York, and featured lowered mirrors, sliding doors, shallow adjustable kitchen sinks, raised electrical outlets, a single water faucet control, a lap board 27 inches from the floor, and a bathtub with a seat at one end. For several years, six units were leased to the Goodwill Industries, right across a highway adjacent to the building, but neither the nearby presence of Goodwill nor the use of the apartment units developed any significant administrative links between the two.

Pilgrim Tower. This building was sponsored by the Pilgrim Lutheran Church of the Deaf in Los Angeles. Opened in 1968, the 112 units were built with a Section 202 Direct Loan, with the aim of serving primarily the deaf and hard of hearing. As a result, some seven out of every eight current residents fall into this category. Architecturally, the building is designed essentially for the elderly. However, once it was built, the sponsor developed a significant signalling system that has been studied frequently since then. It begins with a control panel in the manager's office, with indicators for each apartment. The panel turns on 6-inch high lights in each apartment, with the brightness of a 100 watt bulb, pulsing on and off, to indicate that the manager is signalling. Upon seeing this, the resident turns the TV on to a closed channel, and there, monitored by an office TV camera is the manager, signalling in the sign language of the deaf. This unit prevented serious trouble on one occasion, when a fire broke out on an upper floor, and the residents were led out without any trouble or fuss. The residents, in turn, can use a part of the system for reverse signalling, by buzzing the office, and a light on a panel, as well as a buzzer, goes on. Cost of the entire system was $22,000, but this could have been less if it had been installed during construction.

The large community room on the ground floor presents a graceful, fascinating spectacle,

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with residents signalling to each other in sign language in total silence. The degree of personal interaction is high, but the building's sound level is, of course, very low. Building personnel can all use this sign language. The process suggests that certain forms of handicap and disability can be improved by this kind of social grouping, where there is a benefit from the interchange that derives from the handicap.

Center Park Apartments. This Seattle, Washington, project opened in October 1969, with 150 units, all for the handicapped. Here the architects carefully studied the lessons of Vistula Manor, adding a number of needed features. They provided elevators that were large enough to hold six wheelchairs; electric door plates for entrances; sink faucets at the side of the sink; adjustable sink counters; folding closet doors; higher electric outlets; emergency door pulls or wands; sliding bedroom and bathroom doors; lever door handles useful for arthritics and persons with hand, arm and shoulder limitations, ball bearing kitchen drawers.

This public housing project was additionally sponsored by the Seattle Handicapped Club, which ultimately helped fund a day center building adjacent to Center Park. This provides space and facilities for a wide range of community activities. There is an attached 18-car garage in Center Park, which is very useful for residents with certain more limiting physical conditions.

Walter B. Roberts Manor. The only project for the blind under HUD programming was opened in 1969. It's a small, 42 unit building developed under the 221(d)(3) program, in Omaha. The local Association for the Blind sponsored this building, which is not design modified in any way to accommodate blind persons. The only items adaptive to the needs of the blind are pieces of Dymo tape placed next to the elevator buttons, and the washer and dryer keys with letters punched out in Braille. Names on mail boxes and on doors are punched out on the tape in English. The building, in essence, represents the philosophy that the blind should adapt to the techniques of the sighted, but one could raise the question whether this applies in a building devoted largely to the blind and the partially sighted. Thus, one must examine the further question: are there disabilities which, when grouped, produce additional difficulties in living?

Highland Heights. Highland Heights opened in 1970, under the aegis of the Fall River (Mass.) Housing Authority, and with the very strong assistance of the adjacent Hussey Hospital. This rehabilitation hospital helped to provide an orthopedic orientation to the 208 unit building, that has made it almost the housing component of a very effective, if older, medical facility. The two buildings are connected by an underground causeway, but more important, the hospital provides staffing for the building's clinic, and medical services across a wide range, for the residents. In turn, hospital patients, once they are rehabilitated, can be admitted to the building, when vacancies occur.

Highland Heights has all of the features of Center Park, but also provides handrails; lowered toilet seats convenient for wheelchair users; correctly located phone jacks; external elevator indicators; convenient light switches; smooth internal walls; adequate sleeping areas in the efficiencies; and excellently designed public space.

Highland Heights also provides a unique emergency feature: when the emergency switch in the bedroom or bathroom is activated a light goes on outside the apartment; a bell rings on the floor; gongs go off in the ground floor clinic and the Rehab Clinic at the Hussey Hospital.

Even more significant than the design is the operation of the facility. It has become a focal point of community activity around the needs of the handicapped and elderly, with a host of community services pouring in to meet resident needs. So, for instance, the Fall River Council on Aging is located in Highland Heights. Hot meals programs, surplus commodities, aid referrals, all have emerged, as a result of this presence. But in addition, the District Nursing Service, a Golden Age Club, social workers, therapists, a sewing group, arts and crafts, beauty and barber shop, choral and music groups, all have become part of resident services, whether provided by the Hussey Hospital, outside agency service, volunteers, or simply the normal social interaction that appears in a healthy social organism. Thus despite the unusual range of physical limitations of the residents, their effective functioning is at a high level because of fine building programming.

New Horizons. This 100-unit project opened in July 1972, in Fargo, North Dakota. The architects visited all the prior projects, analyzed all the design problems covered previously, and came up with what probably is the best physical structure for the handicapped in the United States. Rooms are ample, bathrooms are well laid out, shallow sinks arranged so that wheelchairs can be moved underneath comfortably; three central tub rooms are available for those who need assistance in bathing; smoke detectors and a sprinkler system are installed; wall ovens provide a side hinged door and a pull-out shelf below the door; there is a pull-out cutting board, with a mixing bowl cutout. Only the elevators and the rehab room are small. Community facilities in the building are excellent and there is a full joint kitchen, from which a number of residents have hot meals delivered at lunch time, through a nearby meal service. A shopping center exists right across the highway in front of the building. The parking area is entirely covered.

In brief, the building was designed primarily with the wheelchair-bound person in mind, and, except for elevators, is a profound success in this regard.

Independence Hall. This is the largest of the projects for the handicapped, with 292 units on two floors. Opened in January 1973, in Houston, Texas, it is a two-story, sprawling complex, on a 10-acre site, with garden-type, interconnected buildings, in the form of three diamonds, linked at their sides. Two long double ramps, centrally located, lead to the second floor, but there are also two small elevators at each end of the complex. The project includes lever door handles, floor plate openers at several locations for public doors, drive-in showers, with support bars, wide doors throughout, emergency buzzer system to the main office, shallow kitchen sinks, with space underneath for wheelchairs, low kitchen shelving, under-the-burner oven, crafts and workshop space, library and sewing room.

Independence Hall is unique in that Goodwill Industries sponsored the project; it has close ties to the Goodwill plant; many employees are housed; and most significant, everyone who runs the building is handicapped, including administrative, clerical, and maintenance staffs. There is also a strong link to available hospital and medical services, utilized by the Goodwill process.

Creative Living. This building in Columbus, Ohio, is unique as the only one designed for para and quadriplegics. Built on land leased from Battelle Memorial Institute for $1 a year, this Section 236 project opened in October of 1974, is a barrier-free 18 unit one story building, designed for the wheelchair bound person, with additional difficulties in arm movement, as well. Doors are pressure-activated; special plumbing

Housing Projects for the Handicapped

Name	Location	Sponsor	Year Opened	Cost	Size/ Group	Specially Served
Vistula Manor	400 Nebraska Avenue Toledo, Ohio 43602	Toledo Met. Hsg. Authority	1967	$3,800,943	164	Handicapped and elderly
Pilgrim Tower	1233 South Vermont Ave. Los Angeles, Ca. 90006	Pilgrim Lutheran Church of the Deaf	1968	$1,723,000	112	Deaf and hard of hearing elderly
Center Park Apartments	825 Yesler Way Seattle, Washington 98104	Seattle Housing Authority	1969	$2,596,421	150	Handicapped and elderly
Walter B. Roberts Manor	1024 South 32nd St. Omaha, Nebraska 68105	Omaha Association for the Blind	1969	$ 422,900	42	Blind and partially sighted elderly
Highland Heights	1197 Robeson Street Fall River, Mass. 02722	Fall River Housing Authority	1970	$2,942,204	208	Handicapped and elderly
New Horizons	2525 North Broadway Fargo, N. Dakota 58102	Fargo Housing Authority	1972	$1,947,875	100	Handicapped
Independence Hall	Airline Dr. at Buress St. Houston, Texas	Goodwill Industries	1973	$3,179,800	292	Handicapped and elderly
Creative	445 W. 8th Avenue Columbus, Ohio 43215	Creative Living, Inc.	1974	$ 333,100	18	Quadri- and paraplegics

features are required; kitchen cabinets are 30-40 inches off the ground; electrical outlets are about 30 inches high; door openings are never less than 32 inches wide; clothes racks no higher than 48 inches. One section of the building has a dayroom for students from the adjacent Ohio State University Medical School, who work as attendants on an hourly basis, serving the mobility needs of the residents. These range from toileting and dressing in the morning and evening, to turning them, to avoid bedsores, at night.

Creative Living is a by-product of a particularly fine Department of Physical Medicine at Ohio State. Here paraplegic and quadriplegic patients are rehabilitated to the point where they use powered wheelchairs and speaker-phones, press buttons, dial phones, dictate letters, and perform all kinds of light office and daily activity, as if they were the completely normal actions of totally paralyzed persons. It is a tribute to brains, ingenuity, persistence, professional skill, and above all, superhuman faith.

d) *Research into Housing the Handicapped*
The existing supply of housing units for the handicapped, most of which is included in projects for the elderly, only begins to meet the housing needs of our handicapped population. Furthermore, research is needed to develop an understanding of the special needs which the handicapped have in making use of the built environment. There also is a need to evaluate the function and designs of the units already constructed in meeting the housing needs of the handicapped. HUD's Office of Policy Development and Research (PD&R) has begun a program of research along both lines.

The lack of housing which meets their special needs denies the handicapped the independent life they want and are capable of living. This situation is exacerbated by restrictions on the use of outdoor space and a lack of accessibility to public transportation.

PD&R has undertaken several research efforts leading to the provision of a built environment that will allow the handicapped person to be integrated into society, to the extent that he or she desires and is capable of, with a minimum of architectural barriers or other man-made impediments to the achievement of this goal. In this endeavor HUD has sought and received the advice and guidance of the Department of Health, Education and Welfare, the Architectural and Transportation Barriers Compliance Board, the Committees on Barrier Free Design of the President's Committee on Employment of the Handicapped, the American Institute of Architects, and the National Easter Seal Society for Crippled Children and Adults.

PD&R has completed two fairly recent studies to date. The first took place in one of the eight HUD-sponsored buildings for the handicapped, Highland Heights in Fall River, Massachusetts. The Fall River Housing Authority completed a study in 1972 of the effects of residence in a sheltered but non-institutional housing situation on their population of severely handicapped adults. Results showed that such an environment proved to be a positive experience, and that over the short run residents improved in terms of morale and physical functioning.

Because HUD believes that these individuals could better utilize environments that are thoughtfully designed to accommodate their limitations, the American Society of Landscape Architects Foundation (ASLAF) was awarded a two-year $107,000 contract to develop a guide to barrier-free site design. The results of this study are available from HUD and the Government Printing Office in two separate volumes. One is an illustrated manual for environmental designers faced with the need or willing to design accessible sites both for public and private facilities. This guide entitled "Barrier-Free Site Design," covers the design and planning of site features such as parking lots, walks, ramps, play areas, pools, street furniture, lighting, signage, and restrooms. The second, available late this fall, is a compendium of the research which went into the project. It includes population data on the handicapped, criteria on the limitations caused by various types or physical disabilities and the design responses they require; and case studies describing some of the solutions arrived at in the research.

PD&R also has several projects related to the needs of the disabled currently underway. In 1961, the American National Standards Institute (ANSI) affirmed a set of standards (ANSI A117.1) for making buildings accessible to and usable by the physically handicapped. Since that time the HUD Minimum Property Standards, Public Law 90-480 and many State accessibility laws and local buildings codes have specifically referenced the ANSI Standard or have been based upon it. However, as stated in a letter to the Department from the President's Committee on Employment of the Handicapped, one of the sponsors of the original standard,

"...it is widely recognized by professional designers and by administrators that the document is inadequate in defining accessible multifamily housing. Kitchen, bathroom and living space design specifications are not included. Code authorities, legislators, housing developers and city planners are constantly requesting such information..."

In response to a request from the President's Committee and from the National Easter Seal Society for Crippled Children and Adults—the sponsors of the original standard—HUD agreed to begin developing a revised and expanded ANSI standard, which would cover public buildings, dwelling units, and related exterior spaces. The School of Architecture at Syracuse University was chosen to administer the program of research and testing necessary for developing the new standard.

The results of the two-year, $256,000 effort which will be completed in June 1976, will be a performance standard that emphasizes the concept of adaptability. It will reflect the state of the art in accessibility not only in the United States, but also in countries of Northern Europe, which have a great deal more experience than the United States in housing for the handicapped, and which have met with great success in the use of performance standards and in the integration of the handicapped into their community. The new standard will be submitted to ANSI for adoption and to the Department for inclusion in the Minimum Property Standards.

The New ANSI Standard will also incorporate the results of the recently-completed site design study by the American Society of Landscape Architects Foundation.

The first year's work on the ANSI project resulted in a comprehensive state-of-the-art review which is currently being evaluated for possible publication.

St. Andrews Presbyterian College came to HUD with a problem and with a potential solution to be tested. Located on a barrier-free campus in Laurinburg, North Carolina, the college has had considerable experience and success in educating the severely handicapped in placing them in jobs. However, many of their graduates were unable to accept the positions offered them because of a lack of suitable housing within commuting distance. The school recommended mobile homes, and is adapting four standard mobile homes from the surplus disaster relief stock for occupancy by handicapped students. At the end of the two-year $204,000 project, a fifth demonstration unit incorporating as many of the features as feasible will be available for display. The project team is giving special attention to safety factors, and is also doing psychological testing to determine the effects of this sudden increase in independence and in responsibility upon persons who previously led relatively sheltered, protected lives. At first the students living in the demonstration units experienced what Dean Rodger Decker, Project Director, describes as a "halo effect." Because almost all of the St. Andrews students live in campus dormitories and the four students in the demonstration mobile homes are living independently, the handicapped students were among the most popular on campus! All the students are delighted with their homes and have experienced little or no problems with them.

Fall River is currently undertaking a three-year, $97,000 followup study which increases the size of the survey sample so that it can be subdivided by type and degree of disability. This phase of the research will seek to determine if persons with different types or degrees of disability benefit differently from residence at Highland Heights. The results of the study will enable managers to develop a rational set of tenant selection procedures for environments such as Highland Heights. An additional, companion piece of research supported by DHEW is also looking at the original sample of respondents over a five year period to see whether the short-term results found by the initial study continue over longer periods of time.

HUD intends to continue its research in improved housing and community environments for the handicapped a study of the effects of integrating the handicapped into all housing, not just elderly housing or buildings designed for the handicapped is planned for the next two years. An evaluation of small group homes for the developmentally disabled will also be sponsored. In addition, HUD hopes to sponsor demonstrations and evaluations of the design guidelines developed by the previously described ASLAF study.

Although P.L. 90-480 was implemented in HUD's programs by Part 40, Title 24 of the Code of Federal Regulations and by revisions to handbooks for various programs—Low-Rent Public Housing, College Housing, Open Space and Neighborhood Facilities; the documents most affecting the design and construction of HUD related residential projects probably are the Minimum Property standards

Through the MPS's, the Department requires mortgage-insured multifamily projects to be accessible to the physically handicapped on the same basis as public housing, even though P.L. 90-480 does not apply to such projects. Also, all housing for elderly must be accessible.

The mandatory MPS's, consisting of three volumes, one for single family housing, one for multifamily housing and a third for nursing and intermediate care facilities, are supplemented by a non-mandatory volume titled Manual of Acceptable Practices. These criteria are intended to provide a sound basis for determining the acceptability of Department associated housing. They are used by the Farmers Home Administration, Veterans Administration and some military housing programs.

Originally the MPS's were couched in prescriptive language and were directed to specific programs. In 1974 they were reissued. The new documents are written in performance language to allow greater design and construction freedom to meet local needs and to promote more innovative design. They now relate to building types rather than to specific programs. In this way, the three new volumes were able to replace eleven sets of program oriented standards. Hence, HUD does not maintain a separate book or set of criteria for projects of housing for handicapped persons. Material pertinent to design for handicapped persons is contained in all three books–depending on whether the building type used is a detached dwelling, row or apartment house, institutional type building, or other. This distribution of criteria is consistent with the conviction that handicapped individuals should not be isolated into separate projects especially designed for them, but that they should be integrated into housing for non-handicapped families.

By not placing criteria for handicapped persons in a separate MPS, HUD obviated the need to repeat all of the criteria for construction materials and workmanship and much of the site and space planning and other design criteria which are the same regardless of the physical and mental attributes of a project's occupants.

HUD believes the distribution of specific criteria for handicapped persons throughout the three MPS's is more effective than making a single reference to American National Standards Institute A117.1 and stating that all facilities must comply with it. Thus where criteria for amount, size, and location of parking area given for family housing, the corresponding standards for handicapped persons are given; where criteria for walks are given, corresponding special requirements for handicapped persons are given such as maximum gradients and prohibition of steps for stepped ramps between a principal entrance and a vehicular unloading zone. HUD does not repeat criteria which are the same for handicapped and nonhandicapped persons. For example, slip resistant surfaces are required on all walks.

This arrangement permits HUD to invoke A117.1 for a specific feature when that standard is adequate and to set up its own criteria when it is not. A117.1 was written for public, not residential buildings, so it contains no data on kitchen design, showers, bathtubs, and such life safety features as number of exits, flame spread, or emergency power. These items are detailed in the MPS. Other criteria for handicapped persons in excess of material in A117.1 which are found in the multifamily MPS includes accessibility to beds, night lights, minimum hall widths for wheelchair users, prohibition of abrasive wall finishes, non-scald valves in showers, and emergency lighting systems. This material is supplemented by recommendations in the Manual of Acceptable Practices pertinent to space allocation for social, recreational and other common functions, wheelchair dimensions, clearances in common dining areas for wheelchair occupants, entrance facilities–automatic door opener, view panels, vestibules. In short, HUD criteria are more complete and exhaustive than those given in A117.1. In addition, they are constantly being reviewed and updated to take advantage of the most recent technological advances, experience and research–both foreign and domestic.

Section 4

Report
By The
Department of Labor

The Department Of Labor Activity Information Report Under Public Law 90-480 With Respect To Accessibility For Handicapped Persons

Responsibility for construction, modification, and leasing of buildings occupied by the Department of Labor agencies is wholly within the jurisdiction of the General Services Administration (GSA). However, in the National Office and in most of the regional offices, the accessibility provisions of the Act are being enforced.

The following agencies have program activities which have direct responsibility under the Act.

Following are reports of agencies within the Department concerning their activities under the Act.

EMPLOYMENT AND TRAINING ADMINISTRATION (ETA)

A small portion of the Department's Employment and Training Administration's funds granted for the administration of the State Employment Service Program is included in rental of space, which is not subject to control by ETA. ETA policy does require State agencies, compliance with the American National Standards Institute (ANSI) specifications for making buildings accessible and usable by the physically handicapped. However, GSA has established previously that ETA activities relating to space occupied by State Employment agencies do not come under the requirement as it relates to facilities for the handicapped.

Although there is some construction activity at the Job Corps centers, these facilities are not opened to the public, and the physically handicapped persons would have no occasion to enter into the premises for the purpose of transacting business with government officials.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

At present the Occupational Safety and Health Administration (OSHA) standards do not address accessibility to work places for handicapped individuals. Access by itself is not a safety related problem. However, a Department of Labor Safety and Health Report was made on the New Department of Labor Building and OSHA has assisted GSA in setting up alteration plans for existing Department facilities.

OSHA is also participating on an Administrative Advisory Panel, Government Sponsored Research on Design Considerations for the Handicapped. OSHA does have the responsibility to inspect the Department's existing facilities to monitor their compliance with the Occupational Safety and Health Act.

EMPLOYMENT STANDARDS ADMINISTRATION (ESA)

I. COMPLIANCE

A. *Funding Authority.* The Employment Standards Administration is receiving funds under the 1976 DOL-HEW Appropriations Act, P.L. 94-206, to meet operating expenses during FY 1976. Included in this amount is a proportionate share of $4.1 million for rental charges incurred by ESA activities in the National Office and ten Regions throughout the country. These funds are paid to GSA against Standard Level User Charges (SLUC) for the rental of space occupied by ESA offices. Any renovations or alterations to these facilities would be funded on an as needed basis within the funds provided in the Salaries and Expenses appropriation for the Agency. Specific accommodations to meet the requirements of handicapped workers are handled by GSA.

2. Not Applicable

B. *Agency Compliance Mechanisms.*

1. It is an ongoing responsibility of ESA managers at all central, regional, and program levels to assure that ESA facilities are accessible and safe both for handicapped employees and for visitors. There are, however, no specific references or directives in the Department's Manual of Administration outlining precise steps to be taken by managers to assure implementation of the standards promulgated under P.L. 90-480.

The standards established by P.L. 90-480 and ANSI standard A117.1-1971 are supported by ESA and the Department by giving parking preference to handicapped persons, modifying toilet facilities, installing elevators with appropriate controls, lowering telephones, water fountains, and trash containers, and electric eye-controlled entrances where possible. The controlling factor in making many of these alterations is GSA. According to field reports, accessibility to ESA offices has improved during the past year, particularly for larger activities which are generally located in Federal buildings. Most of the smaller field stations and those larger offices which are not accessible, are located in buildings which antedate September 2, 1969, or are postal facilities, all of which are exempt. Regardless of exemption, efforts are made on a continuing basis to upgrade these facilities, with mixed success.

C. Not Applicable

D. *Surveys and Investigations*

1. An extensive and comprehensive safety and accessibility survey was made of the new Department of Labor Building (200 Constitution Avenue, N.W., Washington, D.C.) in Spring 1975, prior to occupancy by the Department. Follow-up action on Department recommendations is continuing.

In anticipation of this report, ESA asked each Regional Office to update the accessibility survey made a year ago. As noted above, virtually all of the larger offices now have good accessibility to the buildings and offices within those buildings. There have been moderate improvements during the year in small offices and field stations. (A significant number of these latter offices are located in postal facilities, which are exempt.) Responses also indicate that less success has been achieved in obtaining the alteration (through GSA) of washroom, telephone and similar facilities which can constitute barriers to handicapped persons. Again, as noted above, efforts at continuous improvement are ongoing.

E. *Waivers and Exemptions*

1. Not Applicable

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. 1-3. Not Applicable

4. The Employment Standards Administration is responsible for the administration and enforcement of Section 503 of the Rehabilitation Act of 1973 (P.L. 93-112) as amended, which requires that government contractors and subcontractors take affirmative action in the employment and advancement of qualified physically and mentally handicapped individuals. In prescribing regulations spelling out affirmative action obligations of government contractors, accessibility is one accommodation which contractors are expected to undertake. Field program personnel, in conciliating complaints of handicapped individuals, provide technical assistance to employers in spelling out ways in which the employer can address and solve accessibility and other work-place barriers for handicapped workers.

5. To the extent that community facilities such as schools, hospitals, airports, etc., are considered to be government contractors, their access to and use by handicapped workers would come under the purview of ESA through its obligations under Section 503 of P.L. 93-112 as described above.

6. Not Applicable.

7. As described under 4 above, ESA promotes a barrier-free work environment through the compliance procedures of the Rehabilitation Act, which encourages specific accommodations by contractors to meet the particular problems of handicapped workers.

8-12. Not Applicable

III. ENVIRONMENTAL BARRIER RELATED RESEARCH ACTIVITIES

A.-B. It is assumed that this section refers to activities other than those internal barrier recognition studies noted above under Section I. No formal research activities are being conducted. Empiric data is being gathered on the broad spectrum of work-place barriers (including architectural) which handicapped workers face. These include machinery design and a broad range of employment policies as well as problems of access. This data is being gathered from complaints filed by handicapped workers afforded protection under Section 503. Insufficient numbers of cases have been resolved at this point in time to reach any broad conclusions concerning the effects of accessibility factors.

C. Not Applicable.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. *Current*

1. ESA has been enforcing the affirmative action provisions of Section 503 of the Rehabilitation Act. Draft final regulations were published in the Federal Register for comment September 3, 1975. Public comments are currently being evaluated prior to publication of final regulations.

B. *Recommendations*

1. The Assistant Secretary of Employment Standards Administration has formally commented to the A&TBCB on GAO recommendations contained in the Comptroller General's Report to the Congress dated July 15, 1975. The Assistant Secretary has expressed ESA's support for the GAO recommendations calling for: 1) a mandate to ensure accessibility which leaves no doubt as to intent or requirements, 2) inclusion of all Government-leased buildings and facilities intended for public use or in which the physically handicapped might be employed as well as privately owned buildings leased to the Government for public housing, 3) requiring the establishment of a system of surveys and investigations to assure compliance and the meeting of appropriate standards for access, and 4) removing the exempt status of Postal Service facilities under the Act.

V. CONSUMER INVOLVEMENT

A. Extensive public comments have been received regarding the proposed regulations for Section 503 of the Rehabilitation Act. In addition to publication in the Federal Register, outreach efforts were made to a wide variety of interested organizations concerned with the unique problems and difficulties of handicapped workers.

VI. COMMUNICATIONS

A. The Assistant Secretary has made nine speeches outlining the requirements of Section 503, Rehabilitation Act, to a variety of labor and employer groups, organizations concerned with handicapped persons, and other interested groups. Other staff personnel in the Headquarters Offices and field offices have made numerous appearances around the country for the same purpose, both in response to inquiries from organizations, and at their own initiative as part of the technical assistance effort to promulgate information about the affirmative action program. A variety of public information materials have been and are being produced. A radio/television public service announcement is in preparation for release in early Spring 1976.

REGIONAL ADMINISTRATION AND MANAGEMENT OFFICE (RAMO)

Summary of the Regional Administration and Management Offices' report on their operations under Public Law 90-480.

I. COMPLIANCE

A. *Funding Authority.* Alterations to Government-owned or leased buildings which are funded by the Department of Labor are excepted from the standards established in GSA's Federal Property Management Regulations (FPMR) 101-19.603 and 101-19.604(b) "Accommodations for the Handicapped."

B. *Agency Compliance Mechanism for All Covered Direct and Indirect Funding Activities*

1. (a) Requests for Space (Standard Form 81) sent to GSA specify that space requested must be accessible to the public and employees who may be handicapped.

(b) Post-occupancy problems are brought to the attention of GSA which is responsible for obtaining covered alterations to Federally-owned and leased buildings.

(c) Necessary steps have been taken to have GSA alter the restrooms, water fountains and telephone facilities in areas where the Department has through its Affirmative Action Program hired a handicapped person. Also access from the street level to DOL floors and to elevator controls have been installed.

C. *Federal Property Management Regulation (FPMR) 101-19.606.* Departmental projects for alterations of buildings in the regions are followed as set forth in FPMR 101-19.604(b).

D. *Surveys and Investigations*

Agency offices bring all architectural-barrier problems outside Regional Headquarters to the attention of the ARDAM's. Follow-up action consists of requests to GSA that problems be corrected or that alternative space be acquired if lease provisions permit. Surveys of DOL space in the region throughout the coming year will include a review of barrier-free criteria as required by guidelines within the Act.

E. No waiver or exemptions to FPMR 101-19.6 have been requested by the RAMO's.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. DOL RAMO's have indicated that their planning is to make all possible efforts to ensure strict compliance with the Act regarding alteration of existing facilities and design plans for acquisition of new facilities, wherever feasible. The Chicago RAMO plans to revise their Space Inspection Report to ensure that Agency officials in field office locations can bring "architectural barrier" problems to their attention more easily. The Kansas City RAMO has written into any request issued to GSA for office space the requirement that space must meet or exceed the Federal Safety and Health Codes, and that space must be accessible to handicapped individuals. More emphasis on accessibility will be put on future requests to GSA for space.

III, IV, V. (Nothing to report.)

VI. COMMUNICATIONS

A. A major portion of the offices currently occupied by DOL components are on Federally controlled space thus reducing the problem of compliance monitoring. There are specific cases documented by the regional offices in Kansas City, Missouri; Philadelphia, Pennsylvania, and Seattle, Washington.

DOL Safety and Health Survey Report of the New DOL Building Julius G. Hansen, Assistant Director, Directorate of Personnel Management for Safety and Health.

Affirmative Action Obligations of Contractors and Subcontractors for Handicapped Workers, Notice of Proposed Rulemaking, *Federal Register*, August 29, 1975.

Section 5

Report By The Department of Interior

Communications

Planning Process
NPS-2
Guidelines, Chapter 9, Public Involvement

Letter to concessioners

Article, New York Times, Sunday, August 3, 1975, page 7

Newsletter, National Park Service, Vol. 10, No. 13, August 13, 1975, page 6

Trends, National Park Service, Jan., Feb., March, 1975

Trends, National Park Service, July-August-September 1974

The Division of Property Management in the Office of Management Services issued a Temporary Regulation No. 11, dated March 28, 1975, as a supplement to the FPMR Subpart 101-19.6, which was later codified in the permanent Interior Property Management Regulations as IPMR Release #75-2, dated July 14, 1975. These instructions established procedures for submission of the reports required by FPMR 101-19.607.

The Department submitted the initial report on GSA Form 2974, for the period of June 30, 1971, through August 30, 1974.

The Division of Property Management issued a Memorandum to the Bureaus requesting that the current report due September 15, be submitted for the period of September 1, 1974, through August 31, 1975.

The semi-annual report due September 15 is being prepared for submission.

IPMR Temporary Regulation NO. 11 and IPMR #75-2.

Management

These are reports of the various bureaus and offices of the Department of the Interior most involved in construction of public buildings or facilities. Inasmuch as each agency has its own funding authority and compliance mechanisms, this memorandum will simply summarize some of the more substantive items from the bureau reports, following the format suggested by your office.

I. COMPLIANCE

The Department has submitted its initial report to the General Services Administration for the period of June 30, 1971, through August 30, 1974. The semi-annual report, due September 15, is being prepared for submission. New property management regulations covering these reporting requirements have also been issued.

The National Park Service, during FY '75, improved its compliance mechanism by a major reorganization of the Denver Service Center which moved the Quality Control and Compliance Divisions closer to top management.

The National Park Service also agreed that in those cases where it can be shown that conditions make it impractical to comply with the Architectural Barriers Act and ANSI standards, a proposal for waiver will be sent to the Chairman of the A&TBCB by the responsible Regional Director for review.

II. GOALS AND OBJECTIVES

The Bureau of Reclamation reports that they are making a special effort to make their recreational facilities accessible. Several new facilities are being planned exclusively for the handicapped to be open in 1976 and 1977.

The Fish and Wildlife Service is fully committed to providing barrier-free public use facilities for the physically handicapped. All new construction and major rehabilitation will be closely monitored to assure compliance.

The National Park Service has adopted new management policies relative to the handicapped which are described in detail in this report.

III. ENVIRONMENTAL BARRIERS RELATED RESEARCH ACTIVITIES

None reported, as this is not in the mission of the Department.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

The Geological Survey proposes to designate a compliance officer and prepare guidelines for their agency with reference to accommodating the handicapped.

V. CONSUMER INVOLVEMENT

The Bureau of Outdoor Recreation maintains liaison with the President's Committee on Employment of the Handicapped, private groups and organizations with specific interests in public outdoor recreation.

The National Park Service routinely solicits input from the public during the planning and decision-making process.

National Park Service

I. COMPLIANCE

A. *Funding Authority*. Authority for programs covered under P.L. 90-480 for planning and construction and road construction is as follows: *Planning and Construction*. For construction, improvements, repair or replacement of physical facilities, without regard to the Act of August 24, 1912, as amended (16 U.S.C. 451); the acquisition of water rights; expenses necessary for investigations and studies to determine suitability of areas to be included in the National Park System, the designation of wilderness areas, and the management of water resources; the preparation of plans for existing and proposed park and recreation areas; provisions of technical assistance to other Federal agencies, and to States and private institutions in the planning, development, and operation of landmarks, parks, and recreation areas; and for financial or other assistance in planning, development, or operation of areas as authorized by law or pursuant to agreements with other Federal agencies, States, or private institutions, including not to exceed $196,330 for the Roosevelt Campobello International Park Commission, ($22,800.000), to remain available until expended.

(16 U.S.C. 1, 1b, 7a-7e, 17j-2, 17k-1, 17n, 431-433, 452a, 461-467, 469h; 40 U.S.C. 484-k; 43 U.S.C. 620(g); 50 U.S.C. 1622-h(1); Act of July 7, 1964 (78 Stat. 299); Act of September 3, 1964 (78 Stat. 890); Act of August 31, 1965 (79 Stat. 588); Department of the Interior and Related Agencies Appropriation Act, 1975.

Road Construction (Liquidation of Contract Authority). For liquidation of obligations incurred pursuant to authority contained in title 23, United States Code, section 203, ($38,820,000), to remain available until expended: Provided, that none of the funds herein provided shall be expended for planning or construction on the following: Fort Washington and Greenbelt Park, Maryland, and Great Falls Park, Virginia, except minor roads and trails; and Daingerfield Island Marina, Virginia, and extension of the George Washington Memorial Parkway from the vicinity of Brickyard Road to Great Falls, Maryland, or in Prince George's County, Maryland. *(16 U.S.C. 1, 1c, 7a-e, 8, 8a, 8d,* *17J-2, 461-467; 23 U.S.C. 201, 203, Act of August 9, 1955 (69 Stat. 555); Federal-Aid Highway Act, 1970 (84 Stat. 1713); Federal-Aid Highway Act, 1973 (72 Stat. 885); Department of the Interior and Related Agencies Appropriation Act, 1975.)*

Preservation of Historic Properties. For expenses necessary in carrying out a program for the preservation of additional historic properties throughout the Nation, as authorized by law (16 U.S.C. 461-467, 470), and investigations, studies, and salvage or archeological values, ($24,516,000), to remain available until expended.

B. *Agency Compliance Mechanism for all covered Direct and Indirect Funding Activities.* Internal Procedures. The Denver Service Center continues to be the central planning and design arm of the National Park Service. One of the major duties of that facility is the monitoring of all in-house, all contract and most regional office design documents for development throughout the United States. Specifically, the recently strengthened Quality Control and Compliance Division provides consultation and monitoring services to the Design Development Teams which are organized on a geographic basis. These services include public law covering Cultural Resources, Environmental Assessment, and Accommodation of Physically Handicapped.

(a) The National Park Service complies with Public Law 90-480 and Federal Property Management Regulations in the design and construction of all visitor-use facilities. In addition to monitoring and consultation by the Quality Control and Compliance Division, each of five Service Center Chiefs of Design monitors the product of his staff and that of A/E contractors. The Service Center Clients, the various Regional Directors also review the product of various stages of development.

(b) The design steps followed by the Service Center constantly monitored for Compliance are:

Design Directive, Approved by Regional Director

Pre-Design Conference, Denver Service Center Personnel

Preliminary Drawings, Approved by Regional Director

Construction Drawings & Specifications, Denver Service Center Personnel

Approved by Manager, Denver Service Center stating that there is compliance with approved preliminary drawings.

Construction, Denver Service Center Personnel. Denver Service Center responsibility generally terminates with construction and acceptance of facility from Contractor—turning over operation and maintenance to the Regional Director.

(c) Procedural modifications which will ensure better compliance have resulted from a major reorganization of the Denver Service Center during FY 1975, strengthening the Regional Team Concept (establishing Chiefs of Design) and strengthening the Quality Control and Compliance Division by relating it closer to top management. Management has directed that consultation and monitoring of design shall start at the very earliest stages of development. Management has directed that there will be new procedures on the content of design directives and preliminary drawings to ensure better control of design, materials, cost, etc.

(d) During FY 1975 the Denver Service Center participated in the design of several innovative comfort facilities for the handicapped and consulted with members of the staff of the Architectural and Transportation Barriers Compliance Board. These projects include facilities in the Lincoln and Jefferson Memorials, a revised "standard" comfort station for use throughout the National Park Service and an experimental "unisex" comfort station for the handicapped actually constructed at George Washington's Birthplace.

C. *Federal Property Management Regulation (FPMR) 101-19.606 "Record Keeping."* The Quality Control and Compliance Division coordinated the preparation of reporting requirements of FPMR 101-19.606 and submitted the June 30, 1971 - August 31, 1974 and the semi-annual August 31, 1974 - February 1975 reports through channels August 22, 1975. The August 1975 report is in preparation.

D. *Surveys and Investigations*

1. No surveys nor investigations were made to determine accessibility during FY 1975, although a survey is underway for the purpose of updating the National Park Guide to the Physically Handicapped. Appropriate criteria was applied to all new facilities designed.

2. Occasional inquiries or complaints about accessibility are handled on a case-by-case basis with the operating area investigating the

complaint and developing an appropriate response.

E. *Waivers and Exemptions*

1. In those cases where it can be shown that conditions make it impractical to comply with the Architectural Barriers Act and ANSI Standards a proposal for a waiver will be sent to the Chairman, Architectural and Transportation Barriers Compliance Board, by the Regional Director responsible for the area with a request for review and action.

2. No waivers nor exemptions were requested in FY 1975.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. Since the last report the National Park Service has adopted new management policies. The following policy on Facilities for the Handicapped will be the guide to Service Managers:

Accessibility to and use of park facilities by physically and mentally handicapped visitors will be provided in conformance with applicable provisions of the Design and Construction of Public Buildings to Accommodate the Physically Handicapped Act (P.L. 90-480, 82.Stat. 718), and other applicable laws and regulations.

To the greatest extent possible, commensurate with their physical limitations, the handicapped should be able to enjoy the park using the same facilities as the nonhandicapped visitor. Park design will facilitate this goal. Special interpretive facilities and programs for the physically and mentally handicapped are encouraged where good potential for participation is indicated. In providing for access to and enjoyment of historic properties by the physically handicapped, the provision of handrails or wheelchair paths may be necessary. Care should be taken that the physical and visual effect of such facilities is minimized.

1. Although we reported in 1974 on alternate transportation methods that we recognized the need for a portion of our tour-bus rolling stock to be especially equipped to accommodate the handicapped, FY 1975 has brought the realization that this is economical infeasible. We have made use of the mini-bus in several instances which has wide doors and is reasonably easy for the aged or infirm to negotiate entry and exit. Consideration has also been made for the handicapped in scheduling vehicles so that there is ample time to get on and off. In addition, special permits will be issued in almost all cases for private vehicles bearing the handicapped to traverse what is normally only a tour bus route.

2. Not Applicable.

3. The Service applies barrier-free criteria to all elements of site development such as parking areas, curbs, walks, trails, etc., although architectural barriers are generally thought of as building related.

4. Not Applicable.

5. On occasion, the National Park Service builds a small school, hospital or other facility in a park; differing from the usual visitor facilities. Barrier-free criteria are also applied to these structures and are applied to structures funded by private business (Concessioners) within a park.

6. The National Park Service in cooperation with the National Recreation and Park Association, Bureau of Outdoor Recreation, and the President's Committee on Employment of the Handicapped, published a special issue of "Trends," which deals exclusively with programs and facilities for the handicapped. An issue of "Trends" also contains several articles concerning the handicapped.

7. The National Park Service has sent a letter and revised "non-discrimination" provisions to all concessioners to inform them of the requirements of the Rehabilitation Act of 1973 and of their affirmative action plan obligations.

8. Not Applicable.

9. The National Park Service adopted the International Accessibility Symbol in 1970, and it is one of the symbols prescribed in our Sign System Specifications.

10. Not Applicable.

11. Not Applicable.

12. Not Applicable.

III. ENVIRONMENTAL BARRIER-RELATED RESEARCH ACTIVITIES

A. Not applicable.

IV LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATION

A. *Current.* In FY 1975 the Service adopted new management policies. A new policy on facilities for the handicapped is quoted under II.A., above.

B. *Recommendations.* None

V. CONSUMER INVOLVEMENT

A. The service routinely solicits public involvement in the planning/decision-making process. The procedure was published in the Federal Register September 3, 1975. Comments are asked within 45 days. The procedure described is already in effect through other directives and although Environmental Barriers Activities are not specifically cited, the procedure is intended to provide a forum for public input involving all aspects of park management and public use.

Bureau of Land Management

I. COMPLIANCE

A. *Funding Authority*

1. (i) Covered under the jurisdiction of P.L. 90-480.

1. Construction and Maintenance Appropriation used for acquisition, construction, and maintenance of buildings and recreation facilities.

2. Oregon and California Grant Lands Appropriation used in part for construction, operation, and maintenance of improvements of the revested Oregon and California Railroad Grant Lands and other Federal lands in the Oregon and California land-grant counties of Oregon.

3. Recreation Development and Operation Appropriation used for construction, operation, and maintenance of outdoor recreation facilities.

(ii) None.

2. Does not apply.

B. *Agency Compliance Mechanism for all Covered Direct and Indirect Funding Activities.* Professional review.

(a) (See enclosed Exhibit A).

(b) Professional review at all phases of design and construction or re-construction as well as post occupancy program evaluations.

(c) None

(d) None

C. *Federal Property Management Regulations (FPMR) 101-19.606 "Record Keeping."* Reporting requirements.

(i) The headquarters office coordinates and prepares the reports on the few covered buildings and facilities. No major activities were necessary.

(ii) Same as (i).

D. *Survey and Investigations.* None.

E. *Waivers and Exemptions.* None.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. Goals, Planning Objectives, Research and Demonstration Strategies.

1. Does not apply.
2. Does not apply.
3. Does not apply.
4. Does not apply.
5. None
6. Does not apply.
7. Does not apply.
8. Does not apply.
9. Does not apply.
10. Does not apply.
11. None
12. None

III. ENVIRONMENTAL BARRIER-RELATED RESEARCH ACTIVITIES

None

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

None

V. CONSUMER INVOLVEMENT

None

Bureau of Land Management
Internal Compliance Procedures
for P.L. 90-480

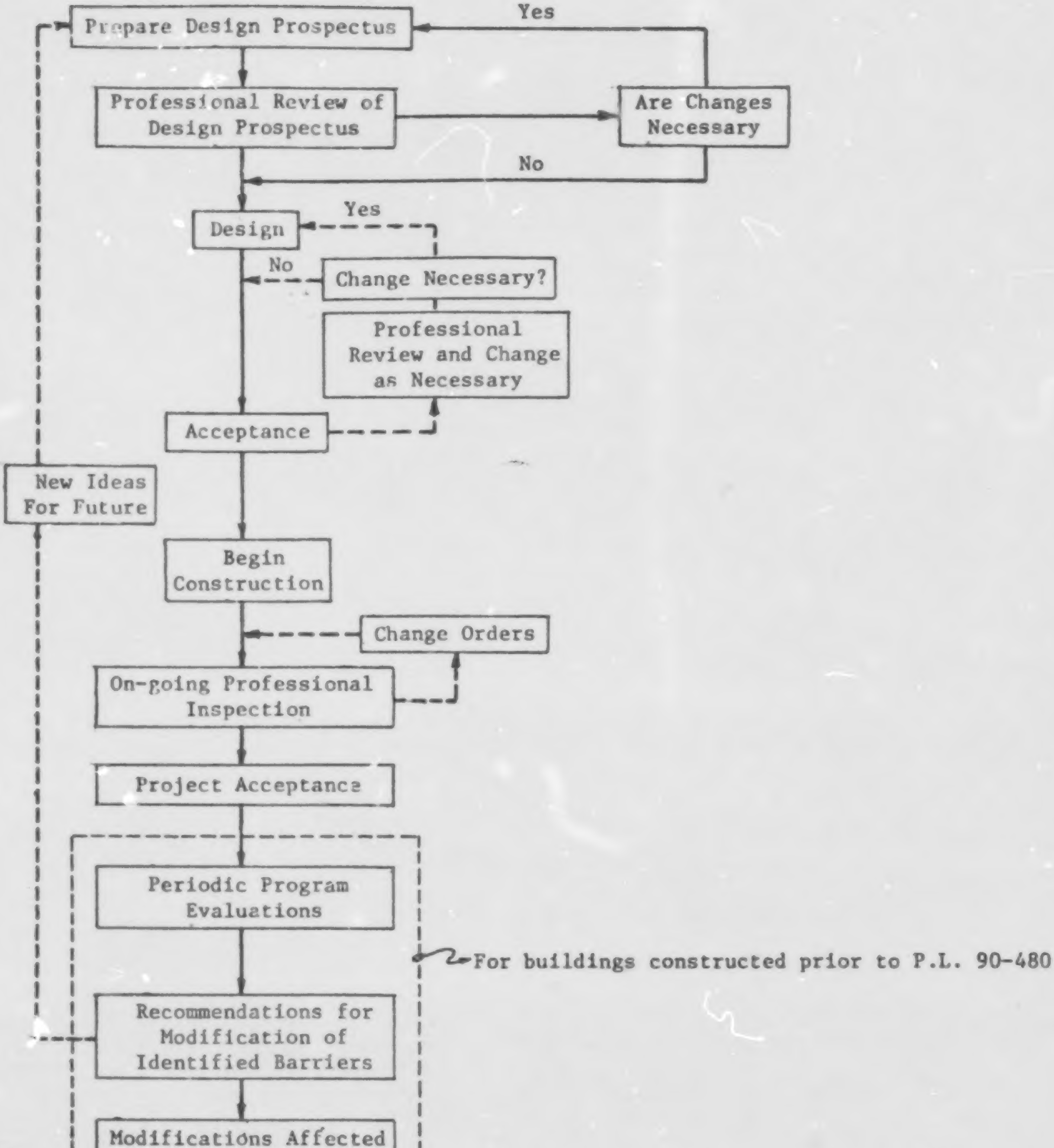
Prepare Design Prospectus
Yes
Professional Review of Design Prospectus
Are Changes Necessary
No
Design
Yes
No
Change Necessary?
Professional Review and Change as Necessary
Acceptance
New Ideas For Future
Begin Construction
Change Orders
On-going Professional Inspection
Project Acceptance
Periodic Program Evaluations
For buildings constructed prior to P.L. 90-480
Recommendations for Modification of Identified Barriers
Modifications Affected thru Maintenance

Exhibit A

Bureau of Reclamation

I. COMPLIANCE

A. *Funding Authority.* There have been no changes in funding authorities since the date of our previous annual report.

B. *Compliance Mechanism.* Compliance procedures were covered in our previous report, and there have been no changes in fiscal year 1975.

C. *Federal Property Management Regulations (FPMR) 101-19.606 "Recordkeeping."* A status report was prepared on GSA form 2974 covering buildings constructed or modified during the period June 30, 1971, through August 31, 1974. This initial status report was submitted in May 1975. Semiannual reports will be submitted by field offices commencing with the period ending August 31, 1975.

D. *Surveys and Investigations.*

1. No specific surveys or investigations have been made. Reviews made at the time of the semiannual report preparation covered in "C" above are considered adequate for this purpose since this Bureau constructs very few buildings requiring access by the general public.

2. No specific system is deemed necessary for reviewing and responding to complaints concerning barriers to the handicapped. Any complaints will be handled at the local level unless a substantial amount of funds are required to correct deficiencies.

E. *Waivers and Exemptions*

1. No requests for waivers or exemptions are anticipated for the type of public facilities constructed by this Bureau.

2. No waivers or exemptions were granted during fiscal year 1975.

II. BARRIER-RELATED GOALS AND OBJECTIVES

A. *Goals and Planning Objectives*

1. It is the policy of this Bureau to comply with the provisions of Public Law 90-480 in construction of buildings and structures open to the general public or in which handicapped employees may be used.

2. In all planning and design for new recreational facilities at Bureau reservoirs, the needs of the handicapped are recognized and appropriate facilities or facility modifications included. (This applies to all planning and design—both for limited facilities that the Bureau will operate and maintain and facilities that are cost shared 50/50 for development and will be operated and maintained by non-Federal sponsors).

Some types of facilities are: grades and trails negotiable by wheelchairs, special docks with protective railings and wide gangways, special picnic tables to accommodate people in wheelchairs, and restrooms with wide doors and necessary grab bars.

3. All new recreation facilities are planned and designed to ensure access by the physically handicapped.

4. The Bureau has planned several new recreation areas exclusively for the handicapped. These should be in operation during 1976 and 1977.

5. Whenever feasible, modifications are being made to visitor centers and other Bureau buildings open to the public in order to accommodate the physically handicapped.

6. The Bureau is reviewing existing recreation facilities, and also encouraging all non-Federal sponsors to do the same and, where necessary, will try to make future modifications to these facilities to allow access by the handicapped.

III. ENVIRONMENTAL BARRIER-RELATED RESEARCH ACTIVITIES

The mission of the Bureau does not include this type of research.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

(None)

V. CONSUMER INVOLVEMENT

A. No procedures have been specified for gaining consumer input with respect to administrative policy decisions relating to environmental barrier activities.

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Bureau of Indian Affairs

I. COMPLIANCE

A. *Funding Authority*

1. See below

(i) Identifiable Bureau programs that fall under the mandate of P.L. 90-480 are:

(a) Design of schools, dormitories and adjacent facilities, either inhouse or by A/E contract.

(b) Construction of the above facilities under direct control of the Bureau's Division of Facilities Engineering, either by contract or force account.

(c) Financial assistance to public school districts for design and/or construction of school facilities.

(d) Renovation of existing structures through the Bureau's MA&I program.

(ii) There are no programs that are not covered.

B. *Agency Compliance Mechanism*

1. Internal Procedures to Ensure Compliance

(a) Compliance with respect to the above mentioned programs is ensured by requiring the facility design to be in conformity with Federal Property Management Regulations, Sub-part 101-17.7, and detailed reference in the Bureau of Indian Affairs Design Handbook and Functional Requirements referring to USAS A 117.1-1961. This information is given to all A/E contractors by the A/E contract manager for the Division of Facilities Engineering at the time of negotiation before design has begun. A diagram of this procedure does not appear applicable.

(b) Before construction begins, during design, the A/E contractor submits his plans for review at three distinct stages of the work; all of which allow the contract manager to check the A/E contractor for compliance. An additional review is made at these stages by the Division of Safety Management. During construction, inspectors under the supervision of the Division of Facilities Engineering verify compliance by the construction contractor.

(c) None

(d) None

C. *"Record Keeping"*

1. Activity to comply with the Reporting Requirements of FPMR 101-19.606.

(i) None

(ii) None

D. *Surveys and Investigations*

1. None

2. We know of no complaints received by the Bureau of Indian Affairs concerning barriers to the handicapped. However, if they were received at the local level, they would be investigated by the local safety officer, facilities manager, and supervisor of involved facility. If it could not be resolved at this level the problem would be referred to the pertinent Area Office for solution.

E. *Waivers and Exemptions*

1. This Agency has never granted waivers nor has it been asked to.

2. See answer given above.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. The goal has been to achieve within the Bureau uniform compliance with P.L. 90-480 as detailed in Item I.B.1. (a) above. No other objectives, research or demonstration strategies have been developed

III. ENVIRONMENTAL BARRIER RELATED RESEARCH ACTIVITIES

No research activities are currently being undertaken.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. *Current*

1. No FY '75 administrative actions or policies affecting compliance were undertaken.

B. *Recommendations*

1. None

V. CONSUMER INVOLVEMENT

A. None

Geological Survey

I. COMPLIANCE

A. *Funding Authority.* The Geological Survey has delegated authority from the General Services Administration for the construction of certain special use facilities. All delegated work is performed according to standards established by the Administrator of General Services under the provisions of the Public Buildings Act of 1959.

B. *Agency Compliance Mechanism for all Covered Direct and Indirect Funding Activities.*

1. The Geological Survey consults with the General Services Administration.

(a) Agency does not have a stated internal compliance procedure.

(b) Internal procedures for compliance review and evaluation. Agency reviews the preliminary planning and the construction proposed by the General Services Administration and consults with GSA about any problems after occupancy.

C. *Federal Property Management Regulation (FPMR 101-19.606) "Record Keeping."* The Administering Agency is the General Services Administration.

D. *Surveys and Investigations.* Consults with the General Services Administration to determine the accessibility of buildings and facilities it occupies or leases through agency assistance. Followup action would be taken by the Geological Survey to see that modifications are made and that the General Services Administration takes action, if necessary.

E. *Waivers and Exemptions.* The Administering Agency is the General Services Administration. Any formal request for waiver or exemption would be made by the GSA.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF THE AGENCY

For the purposes of this report items listed below relate only to the National Center.

A. We have no formally established goals and planning objectives.

1. Transportation systems - none.

2. Residential accommodations - none.

3. Two special areas have been established for parking automobiles by handicapped personnel: (a) one for those with limited walking ability, (b) one for those in wheelchairs.

Ramps have been provided.

Two entrance doors open automatically.

Two telephones (public) that may be used by a person in a wheelchair are available.

All restrooms have wide doors and specially designed fixtures.

4. The Geological Survey headquarters facility at Reston, Virginia, was planned and constructed to conform to all established regulations with regard to assisting the handicapped.

5. The Geological Survey uses the International Accessibility Symbol on public facilities which comply with Standards under Public Law 90-480.

III. ENVIRONMENTAL BARRIER-RELATED RESEARCH ACTIVITIES

None.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. It is proposed to designate a Compliance Officer.

B. Guidelines for the agency will be prepared.

U.S. Fish and Wildlife Service

I. COMPLIANCE

A. *Funding Authority.* The Fish and Wildlife Act of 1956.

B. *Agency Compliance Mechanism For All Covered Direct and Indirect Funding Activities.*

1. (a) The Central Office of Engineering reviews all construction drawings of the Fish and Wildlife Law to ensure that the requirements of Public Law 90-480 are incorporated into all structures covered under this law. Regional Offices, responsible for the preparation of these drawings, are required by FWS directive to design facilities to accommodate the physically handicapped.

(b) There are no established procedures by the FWS for post-construction or post-occupancy review or evaluation.

(c) There has been no modifications to ensure compliance during FY '75.

(d) No evaluation studies have been made during FY '75.

C. *Federal Property Management Regulation (FPMR) 101-19.606 "Record Keeping."* The FWS Office of Engineering maintains records of all construction and rehabilitation projects. We have not up to now been documenting these records with "statements" that the barrier-free standards have been incorporated in the design. Our approval of the final design drawings has been our indication that the standards have been incorporated.

D. *Surveys and Investigations*

1. No surveys have been taken and no investigations have been made on a national scale to determine the accessibility of buildings and facilities occupied by the FWS.

2. The Office of Engineering would review all complaints regarding barriers to the handicapped and would make recommendations for remedial action through the budgetary processes.

E. *Waivers and Exemptions*

1. Requests for waivers would be reviewed and acted on by the Office of Engineering.

2. No waivers were granted during FY '75.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF THE AGENCY

The FWS is fully committed to providing barrier-free public use facilities for the physically handicapped. We carefully review all new construction and major rehabilitation projects to ensure compliance with ANSI standards.

III. ENVIRONMENTAL BARRIER-RELATED RESEARCH ACTIVITIES

No barrier-related research activities were initiated by the FWS during FY '75.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

None

V. CONSUMER INVOLVEMENT

There are no FWS procedures for gaining consumer input into the administrative policy decisions relating to environmental barrier activities.

Bureau of Outdoor Recreation

I. COMPLIANCE

A. *Funding Authority.* The Land and Water Conservation Fund Act of 1965, as amended (78STAT 897). The Bureau of Outdoor Recreation administers the Land and Water Conservation Fund which provides matching grants to State and local units of government for the acquisition and development of public outdoor recreation areas and facilities.

B. *Areas and Facilities.* At the State level the grants are administered by a State official appointed by the Governor whose responsibility includes assuring that all facilities developed with Fund assistance comply with the "American Standards Specifications for Making Buildings and Facilities Accessible to and Usable by the Physically Handicapped." Projects containing eligible items such as walkways, toilet facilities, recreation service buildings and parking areas are reviewed by the State official responsible for the administration of the Fund program. These State officials are also responsible for pre-construction and post-construction inspections as well as triennial inspection of all completed projects.

C. *Federal Property Management Regulations (FPMR) 101-19.606 "Record Keeping."* All project data is recorded by computer.

D. *Surveys and Investigations.* In addition to inspections conducted by the State officials on a selected basis, projects are inspected by the Office of Audit and Investigation, and Bureau personnel from the Washington and Regional Offices.

E. *Waivers and Exemptions.* The Bureau has not established a policy for waivers or modification of design criteria.

II. BARRIER-RELATED GOALS

To assure that all fund assisted recreation facilities are usable and accessible to the handicapped.

III. ENVIRONMENTAL BARRIER-RELATED RESEARCH ACTIVITIES

None

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

None

V. CONSUMER INVOLVEMENT

The Bureau maintains contacts with the President's Committee on Employment of the Handicapped, private groups and organizations with specific interest in public outdoor recreation for input into the Bureau's programs.

Section 6

Report By The Department of Defense

I. COMPLIANCE

A. *Funding Authority.* The authorities for Department of Defense funding for construction, renovation, repair and alteration of buildings are contained in:

a. Annual Military Construction Authorization Acts

b. Annual Defense Appropriations Acts

c. Annual Armed Forces Procurement Authorization Acts

Normally, the Department of Defense does not lease facilities, however, should the department do so, authority would be the Annual Defense Appropriations Acts.

Whether or not any building of the Department of Defense is covered by P.L. 90-480 does not depend on the particular Act under which it is authorized or funded but on whether or not it is excluded under the provisions of P.L. 90-480 itself. The law excludes "(A) a privately-owned residential structure and (B) a building or facility on a military installation designed and constructed primarily for use by able-bodied military personnel . . ." The Department of Defense has taken a broader approach than is required by the law and present policy is that accessibility to the handicapped shall be provided unless the building is intended exclusively (not "primarily") for use by able-bodied military personnel.

B. *Compliance Mechanisms.* Basic Department of Defense policy for the design of buildings is found in the Department of Defense Construction Criteria Manual, DoD 4270.1M. This manual sets forth the policy on design for the handicapped—a copy of which is enclosed as Enclosure 1.

The Military Departments then implement the policy of DoD 4270.1M through their own publications.

Applicable Military Department documents are:

Department of the Army: ER 1110-1-102, "Design Features to make Buildings and Facilities Accessible to and Usable by the Physically Handicapped."

Department of the Navy: NAVFAC-INST 11012.137, "Design for Accessibility of Physically Handicapped Persons."

Department of the Air Force: AFM 88-15, "Air Force Design Manual Criteria and Standards for Air Force Construction" and AFM-88-4, "Building Construction Materials and Practices."

Design of Department of Defense Facilities is accomplished primarily by contract with Architect-Engineer firms although some is done by in-house personnel. When A-E firm is used, the firm is furnished the applicable documents above as guidance for design. Essentially the same process occurs in an in-house design effect. Designs are constrained to conform to this policy (as well as to other policies) while nevertheless being allowed as much latitude as possible for innovative input from the designers. Ultimately, the official responsible for assuring that designs conform to policy is the commander of the field office contracting for or doing the design. It is this official's responsibility to review the designs for technical adequacy and acceptability prior to certifying their completion. During construction there are inspectors who visit the site (or are resident upon it for large jobs) to assure compliance with plans and specifications.

In order to assure that full consideration is given to design for the handicapped at the earliest planning stages of a project, all programming documents for building construction projects for the FY 1978 Military Construction Authorization Act will contain a statement that the building will or will not be designed to be accessible to the handicapped, and, if not, why not, (exclusive use by able-bodied military personnel would normally be the only reason why not). These documents are now in preparation but will not arrive in the Office of the Secretary of Defense for review until August or September of FY 1976. Nearly all documents for the FY 1977 program had been prepared prior to formulation of this new procedure and it was therefore impracticable to apply it to that program.

C. *FPMR 101-19.606.* The Federal Property Management Regulation 101-19.606 does not apply to buildings owned by the Department of Defense.

D. *Surveys and Investigations.* The Department of Defense has undertaken no surveys or investigations to determine accessibility during

1975. However, the General Accounting Office did make a survey of Federal buildings including those of the Department of Defense. Implementation of the policy on providing accessibility was found to be generally poor. The Comptroller General reported his findings to the Congress on July 15, 1975, in his report "Further Action Needed to Make All Public Buildings Accessible to the Physically Handicapped." Because of the findings of the GAO it is the intention of the Department of Defense to use its Internal Audit Agencies and Inspector General organizations to conduct further surveys on this matter from time to time as appropriate.

The DoD has not had to establish a formal procedure for investigating complaints of lack of accessibility since only two have occurred. The first was investigated and determined to be unfounded. The second involved the lack of an elevator in a two-story building. The elevator had been designed but was removed for budgetary reasons. Favorable bids on the building effectively made more funds available and the Construction Agent was requested by the Office of the Secretary of Defense to add the elevator by change order to the contract. No special procedures are contemplated for processing complaints if they remain at their current low frequency. Each will be investigated on its own merits by procedures which appear appropriate at the time. Should the frequency of complaints increase, special procedures would be considered.

E. *Waivers and Exceptions.* If a Military Department should wish a waiver of the accessibility requirement, it would have to request it from the Deputy Assistant Secretary of Defense for Installations and Housing. No such requests have ever been received nor are they expected. Should such a request be received, it would be evaluated on its merits at the time. No requirement is foreseen for the establishment of specific guidelines for the granting of waivers until and unless a substantial number of requests are received.

II. GOALS AND OBJECTIVES

The goals and objectives of the Department of Defense in this area are stated in DoD 4270.1M. Simply put, they are that all facilities which might be used by or visited by the public or might employ civilian workers or might be used by military dependents or retirees shall be accessible to and usable by the handicapped. In addition, recognizing that the function of a building may change, all buildings will be considered for provision of accessibility features and such features will be provided if feasible even though the building itself is not covered by P.L. 90-480.

Of particular importance to employment of the handicapped is the DoD policy that contractor facilities must be accessible if DoD funds are used in their construction. This is stated in DoD 4270.1M as "All manufacturing facilities, administrative facilities, educational facilities where civilian workers may be employed . . . including contractor facilities . . . shall be so designed."

III. ENVIRONMENTAL BARRIER RELATED RESEARCH ACTIVITIES

The DoD does not carry on any research programs specifically related to Environmental Barriers. Since research in this field is adequately covered by other agencies it is the intention of the DoD to use the results of these other efforts rather than to undertake duplicatory projects of its own. Primary among these efforts is that funded by the A&TBCB to the Building Research Advisory Board with the purpose of identifying specific problems of Federal buildings and finding solutions. The Department of Defense is particularly interested in this program since the DoD is unique among Federal agencies in constructing certain types of facilities—manufacturing and religious for example—and it is expected that the BRAB effort will produce highly usable results in this area.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. *Current.* The survey conducted by the General Accounting Office during 1975 has probably had the most positive effect of any action on improving compliance throughout the Federal government including the Department of Defense. This report focused attention on the subject; identified areas requiring improvement; and made several recommendations to the Secretary of Defense for administrative actions as follows:

"We recommend that the Secretary:

- Modify and amplify the ANSI Standard in the "Construction Criteria Manual, Dod 4270.1M" to make it more adaptable to applicable military buildings.
- Clarify the manual to clearly identify those buildings that should comply with the Act.
- Require the Secretaries of the military services to indicate in design instructions and in DD Form 1391, whether buildings in a particular construction project should be accessible to the physically handicapped.
- Establish appropriate controls over the design of buildings to ensure compliance with standards prescribed to eliminate barriers.
- Establish procedures for obtaining a waiver of the prescribed standard.
- Establish a survey and investigation system, as authorized by section 6(2) of the Act, to ensure compliance with prescribed standards."

All of these recommendations are being implemented substantially as made.

B. *Recommendations.* The Department of Defense believes that existing legislation is adequate to assure the elimination of architectural barriers to the handicapped and that this will become more evident as the A&TBCB becomes fully effective, which should be in the near future now that a permanent staff is available to the Board. 1975 has been a year of substantial change and added emphasis to the elimination of barriers. Among these activities were the GAO report, the addition of a staff and enforcement powers to the A&TBCB, and, from a DoD viewpoint the addition of the DoD as a member of the A&TBCB. A period of adjustment and evaluation of the effects of these changes is in order prior to any further extensive administrative and legislative actions.

V. CONSUMER INVOLVEMENT

The primary purpose of facilities constructed by the Department of Defense is the assurance of the readiness of the Armed Forces to defend the nation. Therefore, DoD does not normally engage in the construction of buildings for primary use by the civilian sector or general public. Because of this there is a low ratio of public use of DoD facilities and there is no direct consumer relationship between the DoD and a handicapped section of the public as there might be in the instance of an agency producing facilities specifically for the handicapped. Thus, the Department of Defense does not plan any unilateral action to contact handicapped groups to obtain design input. Rather the DoD looks to inputs from the A&TBCB, HUD, HEW, and the BRAB and other interested agencies for guidance in this area.

VI. COMMUNICATIONS—(See Appendix K)

1. Draft Section of DoD 4270.1M, expected to be published prior to December 31, 1975.
2. Army Engineer Regulation #1110-1-102
3. Navy Instruction, NAVFACINST 11012.137
4. Chapter 8, Air Force Manual 88-4
5. DoD Response to Comptroller General's Recommendations

Section 7

Report By The General Services Administration

I. COMPLIANCE

A. *Funding Authority.* Agency funding authority for construction, leasing, repair and alteration of buildings covered and not covered by P.L. 90-480 is contained in the following legislative history:

1. Section 210(f) of the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 410(f)) establishes the Federal Building Fund and authorizes use of the fund to finance real property management and related activities.

2. Section 210(h) of the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 490(h)) and section 1 of Reorganization Plan No. 180 of 1950 (64 Stat. 1270; 40 U.S.C.A. 490 note) authorizes the GSA to lease space to accommodate Federal agencies.

3. Section 210(a)(6) of the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 490(a)(6)) authorizes the repair, alterations and improvement of leased property.

4. The Public Buildings Act of 1959, as amended (40 U.S.C. 60 et. sec.) authorizes the construction and repair and alteration of public buildings.

B. *Agency Compliance Mechanism for All Covered Direct and Indirect Funding Activities.*

1. Internal Procedures. Internal procedures to insure compliance with ANSI A117.1 consist of a design-review process which proceeds sequentially through the various design stages. A final review of plans for new construction and alteration work is made by in-house architects and engineers prior to advertising for construction bids. Regional Construction Management Divisions (PBS) perform this task as part of their normal review process for compliance with other building program requirements. Office of Construction Management, Central Office, directs and coordinates this function.

2. Procedural Modifications. On December 27, 1974, the General Services Administration (GSA) Order PBS P3410.1C was issued to transmit the revised Handbook "Instructions to Contract Architect-Engineers." The most significant change with respect to architectural barriers was the inclusion of a phrase in the Transmittal Statement requiring architect-engineers to certify that the contract documents are in "compliance with P.L. 90-480 . . . and the standards promulgated pursuant thereto . . ."

C. *Federal Property Management Regulation (FPMR) 101-19.607 "Reporting"*

1. Published in Federal Register, Vol. 39, No. 125, Thursday, June 27, 1974.

2. Loose leaf copies sent to all agencies November 6, 1974.

3. Memo dated August 20, 1974, from Commissioner, L. F. Roush, Public Buildings Service, to all Regional Commissioners, PBS, and Assistant Commissioner for Operating Programs, re: "Accessibility–The Law and The Reality," and FPMR Amendment requiring status reporting on Federally funded buildings.

4. Memo dated October 8, 1974, from Commissioner, L. F. Roush, PBS, to all Regional Commissioners, PBS and Assistant Commissioner for Operating Programs, re: Status Reports on Federally funded buildings required by FPMR 101-19.6 amendment, "Accommodations for the Physically Handicapped."

5. Letter dated October 4, 1974, from Acting Commissioner John F. Galuardi, PBS, to Honorable Stanley B. Thomas, Jr., Chairman of the Architectural and Transportation Barriers Compliance Board, informing him of the reporting requirement.

6. Letter dated April 16, 1975, from Acting Commissioner, W. A. Meisen, PBS, to Honorable Stanley B. Thomas, Jr., Chairman of the Architectural and Transportation Barriers Compliance Board, informing him that required reports are not being received from most agencies, emphasizing the importance of the reports and suggesting that he bring this matter to the attention of the Board.

7. Responses received from GSA regions beginning with June 30, 1971, to September 1, 1974, reporting period for buildings and facilities subject to Section 2 of P.L. 90-480. Responses also received from Department of Transportation for June 30, 1971, to August 31, 1974, reporting period; from the National Aeronautics and Space Administration for June 30, 1971, to June 30, 1975; and a Computer printout of buildings and facilities under design or construction on June 3, 1975, from the

Department of Health, Education and Welfare (DHEW). This printout was accomplished by letters from each of 10 Regions certifying intent to comply with the ANSI standard specifications. Responses have not been received from any other agencies to date.

D. *Surveys and Investigations.*

1. A survey of GSA operated buildings is being conducted in the form of questionnaires designed to gather information or provisions for the handicapped according to the ANSI standard in certain existing buildings. This survey resulted from one agency-level Management by Objectives Program; specifically, the subobjective on barrier-free design which calls for establishment of a program plan and budget for removal of barriers in existing GSA controlled buildings which are not subject to P.L. 90-480 (built prior to September 2, 1969).

Expected benefits of this program are: 1) improved accessibility to all GSA controlled buildings; 2) greater opportunities for employment of the physically handicapped by client agencies and GSA.

Scheduled completion of this subobjective for developing a program plan and budget is February 1976.

2. Complaints regarding barriers to the handicapped are received, reviewed and responded to by in-house architects and engineers in the Central and Regional Offices, PBS. The first step is to determine whether the building in question is subject to P.L. 90-480 and, if it is, which lead agency has jurisdictional responsibility for it. In the case of a facility for which GSA has responsibility, an investigation is made to determine whether a violation of the applicable standard (ANSI A117.1) has occurred. Corrective action is taken where violations are found. Where such violations appear in buildings outside GSA's control, appropriate action is taken to inform responsible agencies or institutions.

E. *Waivers and Exemptions*

1. Only the Administrator of General Services can authorize a modification or waiver of the standards prescribed under Section 2 of P.L. 90-480. Requests for a waiver from another agency or department must come from that agency or department. Waivers are considered on a case-by-case basis in accordance with the Act.

All requests for waivers are referred to staff members at the Central Office level. After careful consideration a recommendation, based upon the Act, the Federal Property Management Regulations, and the merits of the case, is forwarded to the Administrator. This recommendation is reviewed by the General Counsel and at each administrative level prior to reaching the Administrator's desk. The Administrator makes the final decision, either granting or rejecting the request.

2. During FY '75 two waivers were granted by the Administrator of General Services:

a. On January 21, 1974, the Department of the Interior requested a waiver of Section 5.2.1 of the standards for the proposed Chevak Day School, Chevak, Alaska. Section 5.2.1 requires that "at least one primary entrance to each building shall be usable by individuals in wheelchairs." There are no paved streets or four wheeled vehicles in this remote village. Transportation is over snow paths during much of the year and mud paths in the summer. Because of the permafrost the 250 pupil school will be elevated 6 feet, 6 inches above grade level on pilings. After considerable correspondence, including submission of information requested from the Bureau of Indian Affairs, the Administrator of General Services granted a conditional approval of the waiver on August 26, 1974.

b. On January 24, 1975, the Administrator granted a conditional waiver of Section 5.2.1 of the standards to permit emergency repairs to the entrance steps at the existing Post Office and Courthouse in Richford, Vermont. The steps had settled so that they sloped downward toward the street creating a hazard, particularly during inclement weather. Denial of the requested waiver would have delayed this minor ($4,000) but urgent repair job for a protracted period of time during which ingress and egress would have been unsafe. Also, accessibility would have required extensive redesign and renovation of the entrance and possibly the entire first floor.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. The following describes agency activities ". . . which relate to environmental barriers to the handicapped . . . and the A&TBCB's objectives . . ."

1. Not applicable to this agency—see Department of Transportation Report;

2. Not applicable to this agency—see Department of Housing and Urban Development Report;

3. ". . . to require (barrier-free) criteria with respect to that which is Federally assisted . . .," the General Services Administration implemented Public Law 90-480 by including in the Federal Property Management Regulations a Subpart 101-19.6 "Accommodation for the Physically Handicapped." That Subpart, among other things, defines the buildings which are subject to that Act, prescribes the standards of accessibility to be used in designing and constructing those buildings, and establishes record-keeping and reporting procedures. The administration of the requirements of that Subpart is a continuous activity of GSA.

4. National Awareness Campaign. In January 1975, the General Services Administration published a document titled, "*Day on Wheels*," which contains reports submitted by our regional trainees who spent a day in a wheelchair going about their normal assignments. The purpose of the publication is to promote the sense of awareness to problems faced by the handicapped which the participants developed.

Day on Wheels has been distributed to all the colleges of architecture with a cover letter from W. A. Meisen, Acting Commissioner, Public Buildings Service (PBS), in the hope that sharing this experience will improve the understanding necessary for creating a better environment for the handicapped and stimulate incorporation of design for barrier-free architecture in (their) curriculum.

In addition, over fifteen hundred (1,500) copies of *Day on Wheels* have been requested by, and distributed to, architectural firms, consumer interest groups and State and local Governments across the country.

In June 1975, *Day on Wheels* was one of ten recipients of an award in the "GSA Second Biennial Design Awards Program." A nonagency, interdisciplinary panel of the highest professional caliber selected the publication "in terms of the quality of the solution to the problem presented and its contribution to the quality of man's environment."

5. "To implement measures to assure that Federal buildings are accessible to and usable by the physically handicapped . . .," the General Services Administration has contracted for the development of a performance standard which will be more relevant to our construction responsibilities than the currently prescribed standard. The new standard will include such areas as auditoriums, dining facilities, libraries, courtrooms, display spaces, and other special facilities not covered in the current standard. It will also expand upon items included in existing standards which do not afford adequate accommodations to the physically handicapped. In addition, the new standard will address the needs of a wider range of disabilities than present standards which concentrate primarily on the wheelchair bound.

Work on the new standard was begun in May 1975, and will be completed in October.

6. Not applicable to this agency, see Department of the Interior Report.

7. Two parts of the Federal Procurement Regulations have been amended to encourage government use of handicapped workers' services and to ensure the employment of handicapped persons by contractors.

a. Federal Procurement Regulations Amendment 129, which appeared in Vol. 39, Federal Register 24897, July 8, 1974, adds a new Subpart 1-5.8, "Procurement of Products of the Blind, and Other Severely Handicapped" prescribing policies and procedures for procurement of products and services provided by qualified workshops for the blind and other handicapped.

b. Federal Procurement Regulations Amendment 131, which appeared in Vol. 39, Federal Register 26642, July 22, 1974, adds a new Subpart 1-12.13, "Employment of the Handicapped" which implements the Rehabilitation Act of 1973, Executive Order 11758, January 15, 1974, and the Regulations of the Secretary of Labor (20 CFR Part 741, 39 FR 20566, June 11, 1974) by requiring contractors and subcontractors to take affirmative action to employ the handicapped and to make accommodations to the physical limitations of an employee.

8. Not applicable to this agency, see Department of Housing and Urban Development and Department of Transportation Reports;

9. International Symbol of Access

a. Policy. In view of the authority vested in the Architectural and Transportation Barriers Compliance Board by P.L. 93-112, "The Rehabilitation Act of 1973" to promote the use of the International Symbol of Access and the stated objective of the Board to issue guidelines for the use of the symbol, this Agency has established no unilateral policy which might run counter to that established by the Board. However, we have adhered to the following policy, quoted in part, contained in the resolution adopted by the Assembly of Rehabilitation International: "... the symbol shall never be used for any purpose other than to identify, mark, or show the way to facilities that are accessible to persons whose mobility is restricted by disability ..."

b. Suggestions. It is suggested that the Board adopt a resolution establishing the standards of accessibility to be applied and exceptions for use of the symbol as outlined in the Assembly's resolution.

10. Not applicable to this Agency.

11. Results of the survey questionnaire discussed in item 1.d. may well provide the single largest source of factual rather than hypothetical data available on the subject of the cost of barrier removal. This information could form the basis for a report on the cost of providing barrier-free features in existing buildings. Other organizations could benefit from this activity by using it as a guide for the development of a system of assembling information on barrier removal.

12. To assure the evaluation and revision of barrier-free design criteria on a systemmatic and continuing basis, the General Services Administration supported development of the Board's contractual relationship with the National Academy of Sciences, Building Research Advisory Board.

III. ENVIRONMENTAL BARRIER RELATED RESEARCH ACTIVITIES

A. The General Services Administration is not funded to conduct pure research. However, the following activities may be of interest.

1. GSA has determined that a need exists for an audio-visual presentation on the problems encountered by the handicapped and the legal responsibilities of GSA. An effective presentation would stimulate viewers to participate in the creation of a barrier-free environment. Preliminary planning was initiated in FY '75.

2. GSA's "Orientation to the Needs of the Handicapped" has been expanded to include all Real Property Management trainees and other employees.

3. On September 27, 1974, GSA conducted a conference on Barrier-Free Design for representatives from each Regional Office. The conference briefed Regional spokesmen for Barrier-Free Design on all facets of GSA's program.

B. See Items I.C and I.D.

C. The General Services Administration has provided the Board with agency liaison staff support to coordinate activities.

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

A. *Current*

1. Toward achieving the goal of removing barriers in existing buildings, one of the six major program areas in the Alterations and Major Repairs (A&MR) Program has been designated to provide funding for special aids to the handicapped. In addition, the prospectus for all alteration and repair work contains provisions for barrier-free facilities required to make the building in question accessible.

2. See Item I.B.2

B. *Recommendations*

1. As a step toward each agency developing a "self-monitoring" mechanism for compliance, it is suggested that the Board remind other member agencies of the recordkeeping procedures outlined in Federal Property Management Regulations Subpart 101-19.606.

2. P.L. 90-480 does not provide any enforcement mechanism with which the Administrator can compel compliance. Therefore, we suggest that the A&TBCB, which can apply sanctions, proceed to develop compliance regulations to carry out its mandated responsibilities.

3. Buildings and facilities financed with revenue sharing funds are presently not subject to accessibility legislation. We suggest the Board consider this very large loophole and recommend legislative action to the President and the Congress.

4. Very few agencies and departments are following the semiannual reporting requirements of FPMR 101-19.607. We suggest the Board consider this problem and coordinate with GSA so that the information requirements of both bodies can be combined for greater efficiency. Hopefully, joint action will stimulate more responsiveness from other agencies and departments.

V. CONSUMER INVOLVEMENT

No report.

VI. COMMUNICATIONS

A. *Day on Wheels*

B. *Memorandum–January 8, 1975*, recommending that the requirements of the "Handicapped Section of the North Carolina State Building Code" be applied in current projects where feasible because that code is broader in scope than the current standard and the illustrations are helpful in defining the limitations of handicapped individuals.

C. *Memorandum–March 12, 1975*, directing that all projects currently under design and construction be reviewed and inspected to assure that all public spaces including exterior courts and plazas, lobbies, and special features such as display areas, although not specifically covered by existing standards, are fully accessible.

Section 8

Report By The United States Postal Service

This report generally embraces the 1975 fiscal year (which ended June 30, 1975), except in the discussions of significant actions that transcend the 12-month period, or where references to past activities are necessary for clarity, perspective or continuity.

Public Law 90-480, known as the Architectural Barriers Act of 1968, was enacted "to ensure that certain buildings financed with Federal funds are so designed and constructed as to be accessible to the physically handicapped." There are no funding authorities or programs, however, for constructing, leasing, renovating, repairing or altering buildings or facilities under the jurisdiction of the United States Postal Service that are subject to Public Law 90-480, as amended. The U.S. Postal Service is an independent agency that is authorized to establish its own program for postal buildings and facilities, and, subject to specific exceptions that do not include Public Law 90-480, is exempted from Federal laws governing Federal public works and Federal public property. Accordingly, the Postal Service is legally exempt from Public Law 90-480, and the postal building program may not lawfully be regulated by the General Services Administration, the Department of Housing and Urban Development, and the Department of Defense, the three agencies of Government authorized by Sections 2, 3 and 4 of the Act to prescribe standards for the design, construction and alteration of buildings.

Pursuant, however, to its own statutory responsibilities to provide to all its customers ready access to essential Postal Service, and to extend employment opportunities to the handicapped, the Postal Service has exercised its own authority in accordance with the standards suggested by the American National Standards Institute's Standard A-117.1. These standards, which are the same prescribed by the General Services Administration after the enactment of Public Law 90-480, were incorporated in our Design Guidelines for Postal Facilities prior to the enactment of Public Law 90-480, and they are used in the design and construction of new postal buildings as well as in the alteration of existing postal facilities. There is no provision for waiver of these standards.

The U.S. Postal Service has established in its Real Estate and Buildings Department a headquarters staff of qualified engineers who are thoroughly familiar with ANSI A-117.1 standards and have the responsibility for insuring the compliance of postal buildings and facilities with postal regulations on the accessibility of buildings and facilities to the physically handicapped. This staff assists in the design of new buildings to ensure compliance with ANSI A-117.1. It makes inspections of existing buildings to determine compliance with ANSI A-117.1. It additionally directly handles all complaints that are received relative to inaccessibility of our facilities. A member of this staff may, during the course of an investigation, make an on-the-site inspection of a postal facility in order to determine the extent of the problem at hand, and, if necessary, may recommend appropriate modifications to make the building fully accessible to and usable by our physically handicapped patrons and employees.

Pursuant to statutory policy (39 U.S.C. 1003(b)), the U.S. Postal Service makes every effort to hire the handicapped. Physically handicapped applicants are considered for all positions which they are qualified to perform. If a handicapped person is hired at a postal facility which is not accessible to the handicapped because the building was constructed before such accessibility was required, it is the Postal Service's policy to take immediate steps to modify the building to meet ANSI Standard A-117.1 and our Design Guidelines. We do not refuse to hire a handicapped applicant who can perform the duties of a position simply because the position is located in an inaccessible facility.

Through a continuing program of making our architects and engineers aware of the need to design structures with features that provide accessibility to the physically handicapped, the U.S. Postal Service is working to attain a barrier-free environment for all employees and customers.

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Section 9

Report By The Veterans Administration

I. COMPLIANCE

A. *Funding Authority*

1. Public Law 93-414 is the funding authority for the construction, leasing, renovation, repair and alteration of facilities by the Veterans Administration. The following major funding categories are covered by P.L. 90-480:

"*Medical Care* provides for repairing, altering, improving, or providing facilities in the several hospitals and homes under the jurisdiction of the VA."

"*Construction of Major Projects*: For constructing, altering, extending, and improving any of the facilities under the jurisdiction or for the use of the VA where the estimated cost of the project is under $1,000,000."

"*Grants for Construction of State Extended Care Facilities*: Programs to assist the several states to construct state nursing home facilities and to remodel, modify, or alter existing hospital or domiciliary facilities in state homes for furnishing care to veterans as authorized by law."

2. All VA public facility construction programs are covered by P.L. 90-480.

B. *Agency Compliance Mechanism For All Covered Direct and Indirect Funding Activities*

1. a. P.L. 90-480 is complied with through use of VA Construction Standard C.D. 28, "Accommodations for the Physically Handicapped." VA Construction Standards are mandatory for use in all projects involving construction of new VA facilities constructed under the direction of the Office of Construction. They are also used to the maximum extent practicable in the design of projects involving the modernization, alteration, maintenance, and repair of existing VA facilities.

b. The Veterans Administration has a number of review and evaluation procedures by which compliance with all standards, including those having to do with accessibility of the handicapped, is assured. These reviews are accomplished at the following stages of the design and construction process:

Site Planning
Preliminary Planning
Architectural Review of Working Drawings
Resident Engineer Approval of Construction
Post Construction Evaluation of Facility

c. During FY 1975 the procedures for reporting on the Post Construction Evaluations have been modified slightly to more readily facilitate the implementation of the recommendations resulting from the evaluations.

d. No special surveys have been conducted specifically to study compliance with Public Law 90-480. However, during FY 1975, six hospitals and four research facilities were evaluated for conformance to applicable standards, including those having to do with accessibility. In addition to determining compliance with existing standards, these evaluations serve to demonstrate the need for new or revised requirements.

C. *Federal Property Management Regulation (FPMR) 101-19.606.* VA leasing of building space is limited to specialized facilities for outpatient medical care. The special consideration for physically handicapped persons are listed as part of the leasing agreement. Steps have been taken to comply with the reporting requirements of FPMR 101-19.606.

D. *Surveys and Investigations*

1. Accessibility to the handicapped is one of the Veterans Administration's major considerations in the review of its facilities. Compliance with Public Law 90-480 is assured through its continuing design and facility review processes as discussed in Paragraph I-B.

2. There is no formal centralized system for reviewing, investigating, and responding to complaints regarding barriers to the handicapped. Each case is reviewed on an individual basis and usually is resolved on a local basis. With regard to its specifications, VA reviews its standard architectural details on a continuing basis to make its facilities more accessible to the handicapped.

E. *Waivers and Exemptions*

1. The requirements of Public Law 90-480 are implemented by VA Construction Standard CD-28. Veterans Administration Handbook H-08-3, Construction Standards, makes the use of VA Construction Standards mandatory for use in the design of all projects involving construction of new VA hospital buildings and

facilities. A waiver from this requirement requires the approval of the Assistant Administrator for Construction.

2. No waivers were granted to VA Construction Standard CD-28 during FY 1975.

II. BARRIER-RELATED GOALS AND OBJECTIVES OF AGENCY

A. The goals of the Veterans Administration which relate to environmental barriers to the handicapped are as follows:

1. To make all VA facilities barrier free for veterans, VA Staff, and the general public.

2. To develop and provide the disabled veterans with prosthetic devices which will make them less vulnerable to architectural barriers.

3. To assist the seriously disabled veterans in the procurement of specially adapted housing that will provide him with a barrier-free home environment.

4. To assist the service connected disabled veteran in the procurement of automobiles and other vehicles with specially adapted equipment to facilitate his private transportation requirements. This assistance includes:

a. Providing grants to the individual,

b. Conducting appropriate research and development programs,

c. Conducting driver training programs.

5. To assist other agencies with the establishment of policy in the interest of handicapped individuals (e.g. VA, at the request of the Federal Aviation Administration, has submitted recommendations to be used in the development of rules and regulations regarding the air transport of certain handicapped individuals).

III. ENVIRONMENTAL BARRIER-RELATED RESEARCH ACTIVITIES

A. (1) The VA has a continuing program to develop and evaluate prosthetic devices. All of the VA's prosthetic evaluations are published by the VA in the "Bulletin of Prosthetic Research."

IV. LEGISLATIVE AND ADMINISTRATIVE RECOMMENDATIONS

1. The Administrator of Veterans Affairs has directed that all current publications, leases, and contracts be changed to encompass the requirements of VA Construction Standard CD-28, "Accommodations for the Physically Handicapped."

a. The Standards for accessibility should be expanded to include the requirements of VA Construction Standard CD-28.

b. Existing legislation is adequate to enable the VA to accomplish its mission in the interest of the handicapped veterans.

V. CONSUMER INVOLVEMENT

A. VA Consumer Input into the administrative policy decisions relating to environmental barrier activities is provided through the Chief Medical Director's Ad Hoc Committee on Spinal Cord Injury and through VA liaison with the veterans organizations particularly the Paralyzed Veterans Association.

VI. COMMUNICATIONS

VA Construction Standard CD-28
Accommodations for the Physically Handicapped
October 15, 1973

VA Construction Standards H-08-3
Foreword, September 4, 1973

Memorandum:
Extension of VA Participation in Compliance with Architectural and Transportation Barriers

V. Appendixes

Appendix A

Minutes of the Architectural and Transportation Barriers Compliance Board

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20201

MINUTES

Meeting of the
Architectural and Transportation Barriers Compliance Board
January 16, 1975

Board Members Present

Stanley B. Thomas, Jr., HEW
Bernard E. DeLury, DoL
Benjamin O. Davis, Jr., DoT
Dwight Ink, GSA
Thomas G. Cody, HUD
Odell W. Vaughn, VA
James T. Clarke, DoI
Edwin P. Smith, USPS

Staff Attendees

Charles Braun, USPS
Mario Ramsay, USPS
Julius Spiro, DoL
June Wakeford, DoL
Howard Metcalf, DoD
Ira Laster, DoT
Martin Convisser, DoT
Angelo Picillo, DoT
Alexandra Buek, HEW
Anne Beckman, HEW
Kathaleen Arneson, HEW
Dianne Walters, GSA
Larry Kirk, HUD
Michael Albarelli, HEW
Peter Lassen, VA
Jean Hawkins, DoI
Julia Taft, HEW
Ruth Watson, HEW
Mary McKeough, HEW

Board Members Absent

Arthur I. Mendolia, DoD

Invitees

E.B. Whitten, National Rehabilitation Association
Edward H. Noakes, National Center for a Barrier Free Environment

The meeting was opened by Chairman Stanley B. Thomas, Jr., who introduced Odell W. Vaughn, Deputy Administrator, Veterans Administration, who has been designated as the VA representative to the Board.

The Chairman also announced the designation of the Department of Defense's representative to the Board, Arthur I. Mendolia, Assistant Secretary of Defense for Installations and Logistics.

A packet of materials was distributed at the beginning of the meeting for review and comment by Board Members which included the following:

- Resumes of candidates for the Executive Director position.
  Interviews will be arranged for those Board Members who desire to meet the candidates personally: Messrs. Clarke, Cody and Thomas.
- Proposal concerning the issuance of a "commemorative stamp" highlighting the handicapped.
  Recommendations, particularly from the USPS, as to whether the Board should support this proposal should be made to the Chairman.
- Draft Charter for the National Advisory Committee on Elimination of Architectural and Transportation Barriers.
  Comments and recommendations from Board Members should be forwarded to the Chairman.
- A copy of GSA's list of all Federal agencies with construction authority.
  For information purposes only.

The Chairman reported on the status of staffing, indicating that OMB will transfer the slots for Fiscal Year 1975 per the interagency Memorandum of Agreement. U.S. Postal Service has not signed the Agreement, pending legal counsel review. The Chairman indicated that the Department of Defense, as a new member, will be asked to contribute a slot plus salaries and expenses as has each other member agency except USPS.

The Board will request a budget supplement/amendment for Fiscal Year 1976 to support 19 positions, and the slots transferred via the Memorandum of Agreement will revert to the contributing agencies.

The major agenda item was a discussion of the draft Procedures Manual After considerable discussion, it was decided that the Procedures Manual would be redrafted with the following areas specifically cited for revision:

Section I–Organization and Membership

C. *Chairmanship of the Board.* It was decided that rotation of the chairmanship is no longer statutorily possible and this reference should be deleted.

Section II–Staffing

Paragraph A, 4th sentence. After discussion it was decided to delete the sentence entirely because the legislative provision on this subject makes a provision in the procedures manual unnecessary.

Section III–Board Meetings

Concern was expressed by several Members regarding voting rights, particularly whether a person other than Level IV should be allowed to vote, and whether an agency would lose its vote if its Board Member were unable to attend an emergency meeting.

Mr. DeLury, DOL, made a motion, seconded by Mr. Smith, USPS, that staff revise procedures to preserve the agency's voting rights, by proxy if necessary, especially with regard to emergency meetings.

It was decided that meetings of the Board would be held in accordance with *Roberts Rules of Order.*

A(2)–Attendance. It was decided that, in order to maintain an orderly meeting, discussion would be among the Board Members only, with staff becoming involved only at the specific request of their agency's representative.

Mr. Ink, GSA, suggested that name plates be used for the Board Members. This was agreed to by the Board.

A(4)–Voting Procedures. Preservation of voting rights was a concern also in this subsection. General Davis, DoT, suggested deletion of the last sentence and insertion of new language: "A majority vote of the Board Members present will be the vote of the Board." The Board Members accepted this recommendation.

A(5)–Record of Attendance. It was decided that a list of staff attendees would be included in the Minutes to reflect agency participation in the absence of a Board Member. The language was revised to read: "A list of Board Members and their agency persons present and those Board Members absent shall become a part of the permanent record through their inclusion in the Minutes."

A(6)–Special Meetings. Discussion centered around what constituted a "reasonable number of days" for notification of special meetings and preservation of voting rights for those Members unable to attend special sessions. It was decided to retain the "reasonable number of days" language but insert a provision which would limit discussion and voting to the subject matter which necessitated the call of an emergency session.

B–Model Hearing Meetings. Mrs. Taft, HEW, explained the differences between a Model Hearing and a public hearing on compliance. Mr. Clarke, DoI, suggested that while there was good reason to have Board Members at the model hearings, a requirement that Board Members be at compliance hearings would be inappropriate.

There was discussion of the language: "At least three (3) Board Members shall be in attendance. Staff from all member agencies may attend as observers."

Mr. Metcalf, DOD, proposed a change in the wording: "The Chairman shall direct the Executive Director to arrange for public hearings. Board Members and alternates may attend as observers."

Mr. DeLury, DOL, motioned, seconded by Mr. Clarke, DOL, "The Chairman shall nominate three (3) Board Members to serve on the hearing, and the Board votes on the members to participate." The motion was accepted by the Board.

Mr. Vaughn, VA, suggested that it not be a requirement that all three members be present and suggested the substitution of the word "desirable" for the word "shall."

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General Davis, DOT, motioned, seconded by Mr. DeLury, DOL, that the sentence which states that three Board Members shall attend the meeting be amended to read: "It is desirable that at least three (3) Board Members be in attendance." The motion was accepted by the Board.

C–Public Hearings on Compliance. Mr. DeLury, DOL, motioned, seconded by Mr. Ink, GSA, the insertion of the following language: "Staff from all member agencies may attend." The motion was accepted.

Mr. Clarke, DOL, motioned, seconded by Mr. Ink, GSA, the insertion of language on hearing examiners and the Administrative Procedure Act: "Hearing examiners appointed by the Board shall conduct hearings. Such hearings shall be held in accordance with the Administrative Procedure Act (5 U.S.C. 551, *et seq.*). Procedures for compliance hearings shall be established by regulations promulgated in accordance with the public rulemaking procedures." The motion was accepted.

It was decided to amend the language in the last sentence of the first paragraph to read: "If the Board votes to conduct a compliance hearing it will issue a notice of hearing to the affected agency head *and other involved parties* and make appropriate arrangements."

It was decided that some language should be inserted concerning the right to present an opposing view.

Section IV–Reporting Requirements

In paragraphs C(1), (2) and (3), where reference is made to actions to be taken by the Secretary of HEW, insert the phrase: "in his capacity as Chairman of the Board."

Section V-C–Fiscal Accountability

The second sentence should be revised to read: "For that reason responsible officials shall ensure that adequate legal authority exists for any expenditure and should consult with staff counsel or legal counsel available to the Board when in doubt."

The next item on the agenda was a discussion of the study proposal submitted to the Board by the National Center for a Barrier Free Environment. Mr. Ink, GSA, announced that it was necessary for him to leave the meeting before a vote was taken on the study proposal. He cited his support for the Noakes study.

Mrs. Taft, HEW, advised the Board that staff had just learned of a study being undertaken by the National Academy of Sciences which may possibly be duplicative of the study proposed by Mr. Noakes, National Center for a Barrier Free Environment. She indicated that staff would be meeting with NAS during the week of January 20th to determine the extent of its study.

Mr. Noakes, accompanied by E.B. Whitten, National Rehabilitation Association, appeared before the Board to answer questions of its members.

The Chairman, Mr. Thomas, asked Mr. Noakes if the study being undertaken by NAS was very much in line with his proposal. Mr. Noakes replied that he was to meet with NAS, HUD and GSA to review all things that were going on and that it was his understanding that their focus was in design and standards.

General Davis, DOT, indicated that the Board had been told that certain members of the Center had agreed to assign a certain percentage of their staff to the work of the Center. General Davis indicated that the Board would like to have this agreement in writing so that it could become a condition in agreeing to support this proposal. Mr. Noakes agreed to furnish a written statement from the members of the Center.

General Davis suggested that the language concerning space, time, etc., was very loose in the proposal. Mr. Noakes agreed to tighten the language.

Mr. Cody, HUD, noted that there was no indication as to the percentage of time the Executive Director and others would be spending on this project. Mr. Noakes said that the Executive Director "will be about full time on this project."

The Chairman thanked Mr. Noakes for appearing before the Board and advised him that he would be contacted concerning the Board's final decision on his proposal.

Mr. Vaughn, VA, moved that the Board accept the proposal, with Mr. Clarke, DOL, seconding the motion: "Support the proposal if it is determined that it is not duplicative of the NAS project." The motion was defeated.

General Davis, DOT, moved "That the Board should insist that it get a commitment in writing from agencies supporting the Center on their level of participation in the project." The motion was not seconded and was not considered by the Board.

Mr. DeLury, DOL, moved, seconded by Mr. Vaughn, VA: "Review the proposal and determine if it is duplicative, and then present it to the Board again." The motion was accepted by the Board.

No action will be taken on the Noakes proposal until staff has investigated the NAS study to determine whether it is duplicative and has reported to the Board. The Board will then act on the Noakes proposal. Mr. Noakes will be requested to submit signed statements from members of the Center concerning support.

The final item on the agenda was discussion of the compliance paper prepared by staff. The Chairman expressed his appreciation to June Wakeford, DOL, for the extensive work she and her assistant, Julius Spiro, undertook in providing leadership to the Compliance Committee's deliberations.

Staff presented a paper listing areas where guidance was needed from the Board concerning the preparation of compliance policy, regulations, etc. It was agreed that staff would work with the General Counsel staffs of the member agencies in preparing a document which would reflect the general sense of the Board that on each issue the law should be broadly interpreted so the Board can successfully fulfill its Congressional mandate to ensure full compliance with accessibility standards.

The Chairman announced that the next meeting of the Board would be held on March 11, 1975.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20201

APPROVED MINUTES

Meeting of the
Architectural and Transportation Barriers Compliance Board
March 31, 1975

Board Members Present

Stanley B. Thomas, Jr., HEW, Chairman
Bernard E. DeLury, DoL
Dwight Ink, GSA
Thomas G. Cody, HUD
Odell W. Vaughn, VA
James T. Clarke, DOI
Herbert H. Kaiser, Jr., DoT (representing Benjamin O. Davis, Jr.)
A.C. Maevis, USPS

Board Member Absent

Arthur I. Mendolia, DoD

Staff Attendees

Julius Spiro, DoL
Charles Braun, USPS
Howard Metcalf, DoD
Ira Laster, DoT
Kathaleen Arneson, HEW
Dianne Walters, GSA
James Parker, GSA
Larry Kirk, HUD
Peter Lassen, VA
Edwin P. Smith, USPS
Julia Taft, HEW
Jeannette Perry, HEW
Doris Haar, HEW
Galen Powers, HEW
William Bean, HEW
James S. Jeffers, Executive Director, A&TBCB
Michael Albarelli, HEW
Ruth Watson, HEW

Invitees

Jessie Gertman, AoA
James Dillion*
Warren Nellis*

The meeting was opened by Chairman Stanley B. Thomas, Jr. who announced that at the request of the USPS they would first discuss the appointment of Mr. James S. Jeffers as Executive Director of the A&TBCB. Mr. Maevis said USPS does not have any particular objections to Mr. Jeffers, but was concerned with the manner of his appointment–that all Board members had not voted on his appointment–and, therefore, he felt that Mr. Jeffers is not the official Director at this time. Mr. Thomas explained that all Board members were requested to participate in the screening process and that three Board members had interviewed Mr. Jeffers. Mr. Maevis suggested that the decision on Mr. Jeffers' appointment be deferred because USPS had not had an opportunity to review his papers.

Mr. Cody, HUD, expressed the opinion that there should not be a deferral since it is important to move ahead. He suggested the Board think about changing the appointment procedures if necessary, but felt the Board should not get involved in the appointment of all staff.

Mr. Vaughn made a motion that there not be a deferral of Mr. Jeffers' appointment, and that his appointment be approved today, so that the program could move ahead. Mr. Ink seconded the motion.

Mr. Kaiser, DoT, said he is not authorized to vote on this since his Board member, General Davis, was out of town and there was no time to get a proxy, but felt General Davis would support the appointment.

Mr. Ink, GSA, thought there was some merit in having those members who had not reviewed the candidate's papers do so before an appointment is made, but agreed that moving forwarded outweighed deferral.

The vote was taken on Mr. Vaughn's motion: USPS abstained. Mr. Metcalf, DoD, said if DoD had a vote, it would have voted "aye." All others voted "aye," thereby approving the appointment of Mr. Jeffers as Executive Director of A&TBCB.

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*National Academy of Science

Delegation of Authority

Mr. Maevis, USPS, raised the question of the Secretary of HEW delegating the Chairmanship to Mr. Thomas. Mr. Thomas offered to have the HEW General Counsel, Mr. Galen Powers, speak to the USPS General Counsel, Mr. Charles Braun, both of whom were present.

Mr. Braun expressed the opinion that the issue of delegation is one that should be dealt with in a uniform manner. If there is going to be a no delegation rule, then it should apply to everyone, as well as the Secretary of HEW.

Mr. Powers explained that HEW does not see it as a duplicate standard since the Act authorizes the agencies to delegate to an Executive Level IV or higher. The Secretary has delegated this to Mr. Thomas, who is not below a Level IV. He said the Board can have its own view of the law or could ask the Justice Department for a legal opinion.

Mr. Ink, GSA, felt that if only one of the participants raises the question on delegation, then he would be inclined to move forward, but if several of the agencies raised the issue, then he would recommend referral to Justice. DoD stated that they have a problem since Mr. Mendolia has resigned and his position may not be filled in the near future; DoT had not known there would be a discussion on this matter, and had not focused on it. Mr. Kaiser, DoT, said he has no problem with Mr. Thomas serving as Acting Chairman or as Chairman, since he feels the Secretary of HEW has two roles–Chairman and member, and, therefore, he can delegate to an Executive Level IV, as provided by statute. It was also pointed out that the Secretary may not have ample time to devote to chairing this Board in view of the many demands on him.

Mr. Thomas said before continuing further with this meeting, they should have a motion on whether this matter should be referred to Justice, go to the Act as confirming that he can serve as Chairman, or defer to USPS that he cannot serve as Chairman.

Mr. Maevis moved that this question be referred to the Justice Department. Mr. Vaughn, VA, seconded the motion. The vote was: 3 nays, 2 ayes, 1 abstained. Motion defeated.

Mr. Clarke made a motion to change the procedures manual to indicate that the Secretary may delegate, but not below the Level IV. It was seconded. Vote: All voted "aye."

Mr. Thomas then called Mr. Jeffers into the meeting and introduced him to the Board members.

Proposed Statement of Organization and Procedures

Mr. Jeffers explained that the staff had made extensive changes, including policy, and recommended the Manual be approved.

There was discussion on several items, mainly representation on the Board: whether a person who is below the Level IV can vote, and the question of proxy voting. It was agreed that these two items be referred back to the staff and the Manual be resubmitted to the Board after further recommended changes.

There was a great deal of discussion on the directed proxy and the undirected proxy. In response to Mr. Thomas' question, Mr. Powers defined the directed proxy as the "messenger" and the undirected proxy as a Level IV.

Mr. Ink felt that by scheduling items in advance, the Board members would know what would be on the agenda so there should be no serious problems. He felt the Congressional intent was that the key items should be acted on by individuals at Level IV. He made a motion that the voting be done by the Level IV or by the directed proxy. Mr. Vaughn, VA, seconded the motion.

Mr. Ink endorsed the concept of the proxies on page 8 of the manual.

Mr. Maevis said the USPS still has problems with it, and asked Mr. Braun to speak on this. Mr. Braun said the proxy is a step in the right direction, but does not solve the problem fully. If we follow these procedures, and you have something come up at a meeting that was not on the agenda, the directed proxy is out of the voting entirely.

Mr. Ink said he did not intend to bar the directed proxy from discussion. He amended his motion as follows: That there be a directed proxy who can fully participate in the meeting for the undirected proxy; in the event the position of a Board member is vacant, or during extended absences, the individual designated by the agency as Acting could then participate as a member of the Board and vote.

Mr. Kaiser, DoT, suggested a system be devised whereby the final proposals be submitted in writing and carried to the Board members who cannot be present, let them vote, and carry that vote back.

Mr. Metcalf, DoD, pointed out that DoD does not have a Board member at present because of Mr. Mendolia's resignation. The Acting Assistant Secretary would normally be a GS-18 or a Level V, and he would not be able to vote.

The vote on Mr. Ink's amended motion was: 5 ayes.

Mr. Vaughn, VA, raised a question regarding the number of Board members required to conduct a public hearing. In previous discussions, it was agreed that one Board member, with Staff, would be sufficient.

Election of Vice Chairman

Mr. Thomas announced that the Chair had discussed with Mr. Ink the possibility of his serving as Vice Chairman of the Board, and asked for a motion. Mr. Maevis made the motion that Mr. Ink serve as Vice Chairman of the Board, and it was seconded, and passed unanimously. Mr. Ink explained he now had to leave the meeting for an OMB commitment and gave Ms. Walters his proxy.

National Academy of Science Building Research Advisory Board

Mr. Jeffers explained that this project is proposed for one year, funding $145,000. The project has staff support of GSA, HUD, and DoD as they are primary agencies concerned with the project. The proposal is for support of a program on building design criteria for the disabled in Federally owned and leased buildings and facilities. The Building Research Advisory Board, NAS proposes to initiate a program to establish an Accessibilities Criteria Panel representative of government, academic, professional, industrial and consumer interest. It is proposed that the panel will provide a mechanism to ensure that a solid base of facilities accessibility criteria has been established and is continually reviewed for maintenance improvement, application, and responsiveness to identified changes and needs of handicapped individuals. Mr. Jeffers and Ms. Walters recommended favorable consideration of this project. Mr. Maevis requested that the product of the grant be subject to review by the Board.

Mr. DeLury made a motion to approve the project. Mr. Clarke seconded it. There was no opposition.

Gerontological Society

The Gerontological Society is requesting an additional $18,000 to complete a project regarding "Residential Environments for the Functionally Handicapped." Mrs. Gertman was invited to explain the reason for the additional funds. After considerable discussion, Mr. Maevis made a motion that the A&TBCB staff prepare a report on the accounting of the budget figures, what has been achieved, what is needed, and recommend action to be taken by the Board for voting by mail prior to the next meeting. Mr. DeLury seconded the motion. There was no opposition.

Housing and Transportation Report Proposed Outlines

At the request of Mr. Kaiser (representing Board member Benjamin O. Davis, Jr.), Ira Laster presented the outline for the transportation report to the Board. Following a brief discussion, the Board voted unanimously to approve the outline.

With regard to the housing report, Mr. Cody explained that the report has gone through several changes and does not anticipate any funding needed by the Board at this time. Mr. Vaughn noted that VA should be included in the report, and Mr. Kirk indicated that VA was included in earlier drafts, but had been inadvertently left out in this one.

Mr. Kirk pointed out that in the "Outline of Housing Report" under Item I, "Overview of Report," number (3), "Emphasis of severely handicapped and mainstreaming as National Policy," this title should be split so that "Mainstreaming as National Policy" would become item (4).

Mr. Clarke said the reports will be submitted to the Board for review, analysis, and submission.

Mr. Clarke made a motion that the outline be approved with noted changes. Mr. DeLury seconded it. There was no opposition.

Proposed Public Hearing on Housing

Mr. Jeffers explained the purpose for holding the hearing in Chicago May 14-15 and that an outline has been prepared and discussed with HUD as a component of the housing report to be submitted to the Board and subsequently to the Congress. This hearing will complement the housing report. Mr. DeLury expressed a desire to have someone from organized labor attend. Mr. Thomas suggested he send him the name and address of the person and he will send him an invitation.

Mr. Cody made the motion that the hearing be held in Chicago, Mr. Clarke seconded it, and there was no opposition.

Consideration of Funding Bicentennial Disabled Visitor Center

Mr. Jeffers outlined a suggestion that the Board fund a disabled visitors center to offer assistance and information to disabled citizens during their visit to Washington. He indicated that preliminary discussions are taking place with officials at the National Visitors Center located at Union Station in regard to providing services to disabled individuals. Mr. Thomas suggested the Board consider whether it should encourage the staff to develop a RFP dealing with access needs of the disabled during the Bicentennial. Mr. Clarke indicated that the Department of Interior will have a project at the Visitors Center. He suggested that instead of preparing a RFP that staff develop recommendations relative to the needs of disabled visitors. He indicated that these recommendations will be considered by DoI in developing new and in modifying existing projects relating to the Bicentennial. He indicated that the information would be needed by midsummer.

Closing

Mr. Jeffers said he is looking forward to working with the Board in an attempt to develop a progressive and responsive compliance program to insure that the architectural and transportation needs of the disabled citizens are met. He also indicated that various activities are taking place throughout the states and communities and that these areas and jurisdictions are looking to the Board for guidance and assistance. He also stated that staff is in the process of developing a grant management plan for FY 1976. In addition, the staff is in the process of developing a general management plan for the office, including staffing for FY 1976.

Mr. Thomas stated that relative to the consideration and selection of staff, the statute indicates that additional professional and clerical staff be appointed by the Board. Mr. Thomas indicated that he would like to propose that in lieu of the Board covening for determination of each staff selection, that the Executive Director be designated the selecting officer and that the Chairman be the appointing official, and requested the Board's approval of this request. There was no objection.

The meeting was adjourned.

ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD
WASHINGTON, D.C. 20201

APPROVED MINUTES

Meeting of the
Architectural and Transportation Barriers Compliance Board
September 16, 1975

Board Members Present

Stanley B. Thomas, Jr., HEW, Chairman
Bernard E. DeLury, DoL
Dwight Ink, GSA
Thomas G. Cody, HUD
Odell W. Vaughn, VA
James T. Clarke, DoI
Herbert H. Kaiser, Jr., DoT (proxy)
Howard Metcalf, DoD (proxy)
Edwin P. Smith, USPS (proxy)

Agency Staff Attendees

Ira Laster, DoT
Dianne Walters, GSA
Larry Kirk, HUD
Robert Baumbary, VA
Kathaleen Arneson, RSA/HEW
June Wakeford, DoL
Jane Lampmann, OHD/HEW
Paul Menszer, HEW GC
Jean Hawkins, DoI

A&TBCB Staff

James S. Jeffers, Executive Director
Peter L. Lassen
Larry Allison
Michael Albarelli
Lynne Starkweather
Frances Curtis

Board Members Absent

Benjamin O. Davis, Jr., DoT
John J. Bennett, DoD
A.C. Maevis, USPS

The Chairman, Mr. Thomas, called the meeting to order at 2:15 p.m. He asked if there were any objections to the revised minutes. There were none, and the minutes were thereby approved.

Statement of Organization and Procedures

The Chairman said the procedures manual had been distributed to the Board members for comment, and that all the suggestions received had been incorporated into the revised manual except two, which arrived too late: 1) the USPS and 2) HUD's comment that travel should come out of the Board's budget rather than the agency's in terms of travel of the members. He said if there had been time, the latter would have been included, but he did not feel there would be any serious problem with it.

Mr. Clarke asked for clarification of "Board Vacancies" on page 2. He did not have any objections to the definition, but wanted to know if it is illegal or if there would be any problem with a nonlevel IV having blanket voting rights.

Mr. Jeffers referred the question to Mr. Menszer, HEW General Counsel, who stated that his interpretation is that such an individual would be a full voting Board member.

Mr. Metcalf said the Department of Defense has an Acting Assistant Secretary who can act legally in all matters as an Assistant Secretary normally does and probably could do the same thing here.

There was general agreement that the person designated by an agency to fill a Level IV position in an Acting capacity could have full voting rights on the Board.

Mr. Vaughn pointed out that at the last discussion the reason the proxy was used was because two General Counsels said it would be illegal for anyone under Level IV to preside as a Board member. He stated he was in favor of this last ruling because his agency has two people who could attend this meeting and vote.

Mr. Clarke asked if the Board's operation would be unduly restricted by section II.A.2, which states that no policy issue can be voted on by the Board unless it has been placed on the agenda for prior review. It was brought out in further discussion that under Robert's Rules of Order, rules can be waived by a two-thirds vote. Mr. Metcalf said the two-thirds vote is acceptable to DoD.

Mr. Clarke moved that the procedures manual be approved.

Mr. Ink seconded the motion. All voted "aye," except the U.S. Postal Service, who abstained.

Response to the General Accounting Office Report to Congress entitled, "Further Action Needed to Make All Public Buildings Accessible to the Physically Handicapped," dated July 15, 1975

The Chairman stated he has been asked by the Comptroller General, General Accounting Office, to respond to their report on "Further Action Needed to Make All Public Buildings Accessible to the Physically Handicapped," and that a draft response was circulated to the Board for review and comment. He explained that the majority of the agencies responded favorably to transmitting the proposed response. However, he felt that the Board should take this opportunity to discuss their concerns and asked for a motion to accept or reject the proposed letter.

Mr. Vaughn moved that the proposed response to the GAO report be accepted. Mr. Clarke seconded the motion.

Mr. Cody explained his concerns with the letter did not deal with its substance, but were procedural, as he had thought the letter had already been transmitted.

Mr. Ink pointed out that the Board is referred to as "an agency" in the letter and questioned if the Board is by law an agency. If so, he felt it would be subject to many procedures, requirements, and laws. Mr. Thomas asked Mr. Menszer to comment on this.

Mr. Menszer replied that the statute talks about the Board being composed of representatives of departments and agencies and felt, therefore, the Board is not an agency. Mr. Thomas felt the substitution of the word, Board, would be appropriate.

Mr. Ink asked if the statement (page 2), "the Board was made the responsible agency for providing the necessary administrative leadership, direction, and oversight of all Federal activities," had been cross-checked with other provisions of P.L. 90-480.

Mr. Kaiser suggested the addition of the phrase, "within the scope of the jurisdiction of P.L. 90-480," following the words, "all Federal activities" on page 2, for the purpose of placing a limitation on "all Federal activities."

Mr. Jeffers explained that much of the language in the proposed response was quoted from the Senate Conference Report to P.L. 93-112, which created the Board. In addition, he had used a document prepared by the General Counsels of GSA and DoI in addressing the legal issues, and assumed those attorneys had dealt with the issues. He explained that P.L. 90-480 only addresses the compliance function, and there may be instances where the Board will want to exert administrative leadership and direction to various agencies and parts of agencies that would not strictly be covered by the compliance provisions of P.L. 90-480. To exemplify, there could be technical assistance and working relationships developed. He stated he did not see this sentence as restricting itself to compliance as a legal process, but involving the application of leadership and direction over research and similar kinds of activities.

Mr. Ink asked if the Board staff had checked with the legal staff of the agencies concerning the Board's authority and responsibility in granting waivers. Mr. Jeffers replied that as reflected in the minutes of the second meeting, included in the Board's first annual report to Congress, it was agreed among the Board members that no waivers would be issued without prior Board review.

Mr. Metcalf stated that DoD objected both to the proposal that the Board take over the waiver authority and the inspection and survey function from the standpoint that the Department of Defense, as well as HEW and GSA, all have waiver authority, which is an authority they might occasionally have to exercise. He explained there are three or four facilities around the country that DoD might want to waive and DoD would not be willing to give up that authority and responsibility right now. Mr. Metcalf stated that DoD has concurred with GAO's recommendation that the agencies perform the inspection and survey function. He proposed that the letter be confined to respond only to the single recommendation that GAO made to the Board, and delete practically everything except the discussion of the GAO recommendation, to which DoD concurs.

Mr. Clarke felt the Board should specifically pass on individual waivers or satisfy itself that there was a satisfactory waiver process in each agency.

Mr. Jeffers spoke to three of the issues that were raised. In drafting this response, he said the Board staff used a document which was prepared with the active participation of all agencies' general counsels, most particularly the General Services Administration and the Department of the Interior. Mr. Jeffers quoted the report as reading:

> "Monitoring is a key adjunct of the Board's compliance function. Pursuant to section 502(b) of P.L. 93-112, the Board may require all other agencies practice a self-monitoring function as the A&TBCB directs. The A&TBCB was created to insure compliance with the statutes pertaining to architectural barriers.
>
> "Presently, the A&TBCB and GSA, HUD, and DoD each have investigative authority to insure compliance. The Board should assume the lead role in light of its legislative mandate. The statutory investigative authority of GSA, HUD, and DoD should be repealed."*

Mr. Jeffers said he did not accept fully that recommendation, and did not request that the investigative authority of member agencies be repealed, but, in order to fully carry out the mandate of the Board, he feels it is essential that the Board conduct surveys and investigations; P.L. 93-112 references the authority of the Board to conduct investigations. He stated that the surveys would include the type of thing that GSA is requiring through their Federal Property Management Regulations 101.19.606; that is, a survey that is necessary to elicit information for insuring compliance with access standards. In terms of waivers, he read again from the document:

> "For the A&TBCB to become an effective enforcement mechanism, it should be involved in the waiver process. . . .
>
> "Granting the Board waiver and modification authority would have the effect of providing the A&TBCB with the power to grant all forms of relief necessary to be an effective compliance agency. It would facilitate equitable remedies being secured as the A&TBCB would have authority to give redress with respect to the standards as well as alleged violations.
>
> "Providing the Board with authority to issue waivers and modifications will close one gap in the current stru[illegible] Presently, there is nothing to preclu[illegible] HUD, or DoD from issuing a waiv[illegible]odification while a compliance procee[illegible]s pending from the A&TBCB. Such a ruling by GSA could effectively preempt the Board jurisdiction by meeting the dispute before it. Giving the A&TBCB ultimate authority in this area would remove this potential frustration of the statutes."

To identify the document for the Board, Mr. Jeffers read from the cover page:

> "On January 8 Board staff met with General Counsel staffs of each member agency to discuss major legal issues confronting the Board. It was decided that the different issue areas would be thoroughly researched. The assignments are as follows . . ."

Mr. Jeffers explained that a list of the assignments included Mr. Mulligan who represented GSA and Betty Park who represented HUD. This document was contained in the Board's files when he joined the staff, and was used as the major resource for the preparation of the GAO response.

Mr. Clarke felt the proposed letter goes beyond what GAO recommended and proposed that the letter respond only to the specific recommendation to the Board.

Mr. Jeffers read the GAO recommendation:

> "We recommend that the Board coordinate the development of standards by each agency charged with such responsibility, *to insure* that such standards are adequate to eliminate barriers to the physically handicapped in federally financed buildings." (emphasis added)

Mr. Jeffers stated that in order to perform the responsibility to insure that such standards are adequate, it is necessary to engage in other activities in addition to coordination.

Mr. Vaughn said he had discussed the letter with their General Counsel and has no problem at all because VA is going to comply fully. He indicated that should the Board or anyone else identify illegal barriers in VA facilities, they would immediately take action to correct it.

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*Summary of Legal Issues Discussion, Board staff meeting with the General Counsel staffs of each member agency, January 8, 1975.

Mr. Thomas asked which agencies have submitted written concurrences on the proposed letter. Mr. Jeffers replied HEW, DoI, DoL, VA, and DoT. Mr. Clarke and Mr. Kaiser asked to withdraw their agencies' concurrencies since the report does not affect them.

Mr. Clarke made a motion that the letter be amended by deleting those portions beginning on page 3 with the first full paragraph, and ending on page 4 with the words, "Compliance Board." Mr. Kaiser seconded it, and the motion was passed unanimously.

Mr. Ink made a motion that everything beyond the words, "Compliance Board" on page 4 be deleted, except the final paragraph on page 8 that says, "The Board appreciates the opportunity to comment . . ." Mr. Ink stressed that he did not want this proposal to be interpreted as objecting to or rejecting the deleted items–he felt they merit discussion. Mr. Metcalf seconded the motion. The vote on this amendment was four in favor of the deletion as cited, and three opposed; therefore, those sections will be deleted from the GAO response.

Mr. DeLury asked if it would be stated in the letter to GAO that other items will be covered in the annual report. Mr. Thomas replied that it could be, but the final response will not be circulated to the Board for review, since it is already late.

Mr. Thomas stated that in respect to the items addressed in the GAO letter which were eliminated, it would seem that by the next Board meeting, staff should prepare some position papers on the issues, with prior circulation, so the Board could take some action. He felt it is very critical in terms of the Board's future activities to have by the next Board meeting some position papers on those issues developed and circulated; he encouraged them to discuss the issue papers internally within their agencies; and be able to send comments back as a result of that circulation.

Mr. Thomas asked for a vote on sending the letter as amended. There was one vote in opposition, one abstained, and six in favor. Therefore, the letter will be sent to GAO as amended.

A&TBCB Transportation Report

Mr. Thomas asked Mr. Kaiser for a status report and he yielded to Dr. Laster.

Dr. Laster stated the Transportation report is in the process of being prepared and anticipates receiving a draft of that report from the contractor by Friday of this week. The report will then be circulated for concurrence within DoT. Dr. Laster anticipated that the report will be available for review by this Board on October 1. He said the report will cover such items as the characteristics of the handicapped population, descriptions of the types of barriers that the handicapped individuals face, discuss the economic and other barriers associated with the prevention and elimination of barriers, discuss the present and planned activities to eliminate barriers, and cover further administrative actions needed in the area of the elimination of transportation barriers.

Mr. Jeffers asked if the report will include legislative recommendations. Dr. Laster responded it would not, as they felt that there are enough statutory provisions. Mr. Jeffers pointed out the statute does request that the Board provide recommendations for administrative and legislative changes deemed appropriate.

Mr. Thomas summarized the basic issues as brought out in the discussion: DoT is preparing a report; it is highly unlikely that they will propose any legislative changes; Mr. Jeffers makes known the fact that the statute permits such legislative recommendations to be made; upon submission of the report, if, after analyzing it, staff believes there are potential legislative changes that might be made, it would be appropriate for staff to develop those changes and circulate them to the Board, and the Board come to some agreement.

Mr. Clark asked if there are any time deadlines. Mr. Jeffers replied that both reports, transportation and housing, are due to Congress by September 30, 1975.

A&TBCB Housing Report

Mr. Thomas asked Mr. Cody to introduce the report. Mr. Cody explained that the draft report was delivered to Mr. Jeffers, whose staff had added a great deal to it.

Mr. Jeffers explained one section of the housing hearings are included in the draft and that the other three sections are being prepared for inclusion in the appendix. He called attention to the recommendations on page 64.

The discussion on the Housing report brought out the following items:

Mr. Ink stressed the need for implementation plans.

Mr. Vaughn felt the recommendation, "national policy to meet housing needs," is not sufficiently clear.

Mr. DeLury suggested a transmittal letter could highlight some of the thoughts contained in the report.

Mr. Kaiser said DoT has no objections to the report and thinks it is a good one. However, he offered a substitute paragraph for page 69–the third full paragraph–for clarification purposes:

> "The transportation report will include information about (1) the characteristics of the mobility limited; (2) the types of barriers that affect their mobility; and (3) present and projected efforts to eliminate travel barriers in all modes of transportation."

Mr. Vaughn made a motion that the housing report be approved as submitted and forwarded to Congress. Mr. Cody seconded it. The vote in favor of this motion was unanimous. (Mr. Kaiser's vote in favor of approving the housing report was with the understanding that the third paragraph on page 69 be revised as he suggested above.)

Mr. Thomas asked that the minutes show that the Board would like the staff to come forward with some ideas on how we can stimulate the implementation of the recommendations.

A&TBCB Annual Report to Congress

Mr. Thomas asked Mr. Jeffers to discuss the second annual report to be sent to Congress.

Mr. Jeffers explained that the survey questionnaire for the annual report was sent to the agencies August 11 with a request that it be returned by September 15. He reported that only one agency, USPS, has responded to the questionnaire to date. He encouraged the Board members to exert their influence on their agencies to get the information to him so staff might prepare for Board consideration a draft annual report. He would like to circulate it to the Board no later than the middle of October, and request that the Chairman either call a special Board meeting the last of October or perhaps discuss it at the November meeting.

There being no further business, the meeting adjourned at 3:30 p.m.

Appendix B

Report On Housing Needs Of Handicapped Individuals

(Excerpts: pages v–vii, 20, 91–107)

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Housing Report

INTRODUCTION

The Rehabilitation Act of 1973 (Public Law 93-112) as amended by the Rehabilitation Act of 1974 (Public Law 93-516) established the Architectural and Transportation Barriers Compliance Board. One of the major charges given the Board was to "investigate and examine alternative approaches to the . . . barriers confronting handicapped individuals, particularly with respect to . . . residential and institutional housing." In considering the housing needs of handicapped individuals, the Board was instructed to "determine what measures are being taken, especially by public and other nonprofit agencies and groups having an interest in and a capacity to deal with such problems."

The Board was directed to make to the President and the Congress reports which shall describe in detail (1) the results of its investigations concerning housing and (2) its recommendations for legislation and administration necessary or desirable to make housing available and accessible to handicapped individuals.

Toward achieving its investigative mandate and role as a major national force in the elimination of barriers, the Board was given authority to conduct investigations, hold public hearings, and prepare and submit to Congress and the President plans and proposals for further actions necessary to provide adequate housing for handicapped individuals.

The Board recognized that as a foremost action essential to securing the information sought by Congress, and developing the Board's housing program, it was necessary to identify and bring together in a cooperative effort the many agencies, organizations, and groups already working toward housing goals or whose cooperation is essential to effective and comprehensive action. Accordingly, the Board conducted a national hearing on housing for handicapped individuals in Chicago, Illinois, on June 9 and 10, 1975.

The Board's objectives in conducting its first national hearing on housing were to: (1) obtain information regarding the views and recommendations from organizations, groups, and individuals representing the handicapped; (2) assess the interrelated aspects of the various services which affect construction; (3) determine the attitudes and trends of the housing industry, both public and private, relative to the needs of handicapped persons; (4) identify and examine problems to the production in adequate amounts of a variety of residential accommodations for severely disabled individuals, and to the provision of satisfactory noninstitutional housing alternatives, (5) identify any conflicts between Federal, State, and local barriers legislation and programs in order to promote and assure consistency of approach and complimentary activities at each level of government; and (6) develop administrative and legislative recommendations relative to the housing needs of disabled persons.

One hundred and thirty organizations, group, and individuals professing an interest or commitment in removing barriers to the handicapped were invited to attend the hearing and submit written testimony regarding their perception of the housing needs of disabled persons. Individuals representing major consumer organizations with housing related programs and major segments of the housing industry attended the hearing to express their views and experiences, and to identify and explain actions necessary to create desirable living arrangements for handicapped individuals.

The information provided the Board at the hearing carried with it certain key areas of concern and deliberation. Both consumer and industry representatives were largely in accord in their recognition of the social need of housing for the disabled, and in their identification of related policies, programs, and activities lacking yet essential to their effective and cooperative action in meeting this need.

In developing this report, the Board has organized the viewpoints and recommendations of those organizations deemed essential to securing comprehensive action in housing. These consumer and industry observations are contained in this report under nineteen major topics.

Although not exhaustive, the Board feels that these topics address primary concerns, problems, and needs in providing housing for disabled persons.

Following this section, the Board has identified for the immediate attention of the President and Congress actions necessary to the development of national efforts in providing housing for handicapped individuals.

Contained in the appendix is a comprehensive documentation, prepared by the Department of Housing and Urban Development, of existing Federal legislation and programs affecting housing for the disabled. Lastly, the appendix provides the Board's summary of the full proceedings of its hearing on housing.

The Board has assembled the information and recommendations contained in this report not as a thorough and exhaustive documentation of the housing related needs of the handicapped, but rather as essential information necessary for the establishment of a national commitment, leadership, and direction around which the concerted and essential resources may be assembled.

RECOMMENDATIONS TO THE PRESIDENT AND TO CONGRESS

It is recommended that:

1) Consideration of the housing needs of disabled persons be addressed at the highest levels of government and that the President and Congress jointly develop a national policy to meet the housing needs of these individuals.

2) Support of public programs designed to address the housing needs of disabled persons be continued and that policy makers seek to facilitate and encourage the private sector to provide adequate and appropriate housing alternatives for disabled persons.

3) Recommendations made at the national hearing on housing for handicapped individuals be given full consideration and review in developing further housing programs and policies. Further, that such policies reflect the stated needs and preferences of disabled persons and the capabilities and resources of builders and related providers.

LAWS RELATING TO ACCESSIBILITY

Public Law 90-480 (known as the Architectural Barriers Act of 1968)

This law applies to any building or facility intended for public use, or which may produce employment or result in residence by the physically handicapped. It applies to any building or facility:

(1) Constructed or altered by or on behalf of the United States;

(2) Leased in whole or in part by the United States;

(3) Financed in whole or in part by grant or loan made by the United States.

If buildings or facilities were constructed, altered, or leased after September, 1969, and meet the above conditions, then compliance is mandatory.

The interpretation that Federal funds channeled through state and local governments or agencies are not subject to this law has never been tested in the courts nor has compliance been enforced by any Federal agency.

This law does not apply to privately owned residential structures or buildings and facilities intended for use by able-bodied military personnel.

Title 24, Part 40 (HUD's part of Public Law 90-480

This part excludes from compliance any portion of a residential structure or its grounds which is not intended for public use or for use by physically handicapped persons. Also excluded are alterations which are not structurally feasible or which do not pertain to the quoted standards.

The American National Standards Institute (ANSI) standards A117.1 are referenced as the applicable standards, except where exceeded by HUD's Minimum Property Standards. Publicly owned residential structures which fall within the purview of the law include:

(1) Any residential structure which, in whole or in part, is intended for occupancy by the physically handicapped or designed for occupancy by the elderly;

(2) All elevator residential structures;

(3) Any residential structure which contains 25 or more housing units; and

(4) Nonresidential structures appurtenant to a residential structure covered under this part.

Public Law 91-205 amends Public Law 90-480 to include construction of the Washington, D.C., Metro network

The U. S. District Court ruled in 1973 that if the stations were not accessible to handicapped persons, they could not be opened. Metro is not planning to install elevators in three of the six stations scheduled to open in the fall of 1975, and petitioned for a waiver not to install an elevator in the Gallery Place Station. Again, the U. S. District Court ruled in July, 1975, that this station could not be opened until it was accessible to handicapped persons by installation of an elevator.

Metro has indicated that the subway cars will not be accessible to certain types of handicapped persons, such as those using wheelchairs. Thus Metro may eventually be brought back into court.

These proceedings should be followed closely because of their pivotal nature. Precedence in this case will effect future cases in housing, employment, education, recreation, and other forms of transportation.

Public Law 93-112, Section 502 established the Architectural and Transportation Barriers Compliance Board

The Board included eight Federal agencies: Departments of Labor; Housing and Urban Development; Transportation; Health, Education, and Welfare; General Services Administration; Veterans Administration; and United States Postal Service.

The Board was mandated by law to ensure compliance with prescribed standards as well as to examine alternative approaches to eliminating barriers in transportation, housing, public buildings, and parks. The Board is to keep abreast of measures being taken at all levels of government and by nonprofit agencies. The Board will report to Congress on its investigations, and will also make recommendations for necessary legislation and administration to eliminate barriers.

In carrying out its functions, the Board is authorized to conduct investigations and public hearings, and to issue final orders to ensure compliance. The Board may appoint as many hearing examiners, advisers, technical experts, and consultants as it deems necessary. The component Federal agencies of the Board are required to make such technical and administrative assistance available as necessary for the Board to carry out its functions.

At the end of each fiscal year the Board shall make to the President and to Congress reports on its activities and investigations, with its recommendations. Final reports on transportation and housing are required by September 30, 1975.

The transportation report will include information about (1) the characteristics of the mobility limited; (2) the types of barriers that affect their mobility; and (3) present and projected efforts to eliminate travel barriers in all modes of transportation.

The housing report will determine the housing needs of handicapped individuals and recommendations on how to make housing available and accessible to them.

Both reports are required to include a state of the art, as well as plans and proposals for further actions in cooperation with agencies and organizations already working toward such goals.

Public Law 93-516, Sections 110 and 111

This law amended Public Law 93-112 by adding the Department of Defense to the Architectural and Transportation Barriers Compliance Board and establishing the Secretary of Health, Education, and Welfare as the permanent chairman of the Board. The amendments also provided for an executive director, supporting staff, and Consumer Advisory Panel.

The Board was given the power to withhold Federal funds with respect to any building found not to be in compliance with prescribed standards. The Board was given authorization of $1.5 million for the fiscal year ending June 30, 1976.

The due date for the reports to Congress on housing and transportation was extended from January 1 to September 30, 1975.

FEDERAL AGENCY HOUSING LEGISLATION

Department of Housing and Urban Development

The Department administers a number of programs which can provide housing and other benefits for the elderly and handicapped. Chief among these are:

- Section 202 of the Housing Act of 1959, as amended by the Housing and Community Development Act of 1974 (HCDA of 1974);

- Section 8 of the United States Housing Act of 1937;
- Title I of the HCDA of 1974;
- Section 701 of the Housing Act of 1954, as amended by the HCDA of 1974; and
- The HUD research authority contained in Title V of the Housing and Urban Development Act of 1970, as amended by the HCDA of 1974.

There follows a brief description of each of these programs, as well as a detailed description of efforts undertaken by the Department to develop housing designed in whole or in part for handicapped persons and HUD research activities in this area.

Section 202 of the Housing Act of 1959

Direct Federal loans under section 202 are available to nonprofit corporations and nonprofit cooperatives for housing projects specially designed for the elderly and handicapped. A set aside of section 8 contract authority is available for these section 202 units.

For purposes of the revised section 202 program, a person is considered handicapped if he is determined, pursuant to regulations issued by the Secretary, to have an impairment which (a) is expected to be of long-continued and indefinite duration, (b) substantially impedes his ability to live independently, and (c) is of such a nature that the ability to live independently could be improved by more suitable housing conditions. A person is also considered handicapped if he is a developmentally disabled individual as defined in section 102(a)(5) of the Developmental Disabilities Services and Facilities Construction Amendments of 1970.

Section 8 of the United States Housing Act of 1937

The new section 8 Housing Assistance Payments Program for Lower-Income Families offers a vehicle for assisting individuals, including elderly and handicapped persons, who cannot afford decent housing on the private market. Projects may be financed by FHA-insured loans or any other method of financing, with Section 8 assistance being provided on behalf of eligible lower-income persons and families through assistance payments contracts with the housing owners. Section 8 payments may be made with respect to projects which are designed in whole or in part for occupancy by the elderly and handicapped.

Section 231 of the National Housing Act

Nonprofit, profit-motivated groups and public agencies may sponsor the construction or rehabilitation of specially designed rental housing for the elderly or handicapped under section 231 of the National Housing Act. This program provides for Federal insurance of project mortgages within interest ceilings set by HUD. Section 231 uses the same definition of handicapped person as that described above in connection with the section 202 program.

Community Development Block Grant Program (CDBG)

The CDBG Program, authorized by Title I of the HCDA of 1974, consolidated several existing categorical programs for community development, including Open Space Land grants, Public Facility loans, Water and Sewer and Neighborhood Facilities grants, Urban Renewal and Model Cities grants and Rehabilitation loans. Funds under the program are made available to units of general local government upon application and may be expended for a wide range of community development activities. The program is designed to accord a maximum amount of freedom to local officials in the formulation and execution of community development programs, with a minimum of Federal review.

There are several features of the program which are of special interest to the handicapped. For example a number of the activities for which CDBG funds can be expended may benefit handicapped persons. In this regard, section 105(a)(5) of the block grant statute makes the undertaking of special projects to remove material and architectural barriers which restrict the mobility and accessibility of elderly and handicapped persons an eligible activity. Funds may also be used for acquiring housing sites, including housing for the handicapped; for rehabilitation financing, including funds for handicapped homeowners; for code enforcement projects to upgrade housing. In addition, a wide variety of public works facilities may be of benefit to handicapped persons, including senior centers neighborhood facilities and recreational and park facilities.

In order to receive CDBG funds an applicant must comply with certain requirements. Below are some of the requirements which may be of particular concern to the handicapped.

Applicants must prepare a community development plan summary, program and budget to determine needs, goals, and objectives. The plan must identify community development needs of the entire community, including the handicapped. A Housing Assistance Plan "HAP" must be submitted which (a) surveys the condition of existing housing in the community and assesses the needs of lower-income persons (including elderly and handicapped persons, large families, and persons displaced or to be displaced) residing in or expect to reside in the community, (b) states "a realistic annual goal for the number of dwelling units or persons to be assisted" and (c) specifies the locations by census tract of the proposed housing for lower-income persons.

A citizen participation plan must be developed for all segments of the community. The Act requires the applicant to furnish assurance that (a) citizens will receive adequate information about the program, (b) public hearings will be held to obtain the views of citizens and (c) opportunities are permitted for the citizens to participate in the development of the application. Handicapped citizens may in this way articulate needs, express activity preferences and assist in selecting priorities for the plan and program. They may also assist in program implementation by monitoring activities related to their interests and by employment in the program and involvement in its evaluation. Although final determination on the use of the funds is the sole responsibility of the recipient, the recommendations of citizens must be taken into account.

Environmental review and relocation requirements as they apply to the new Act, do not focus on specific population groups. However, as with other displacees "last resort housing" may be used for handicapped displacees if no other appropriate housing is available for them in the relocation process.

In addition to entitlement grants, funds are available to communities at the discretion of the Secretary for community development activities. As a general matter these funds may also be used to serve the handicapped. For example, while not specifically for them, the discretionary funds allocated to new communities may be used for projects meeting the needs of handicapped persons.

Discretionary funds are also available for innovative projects which encompass a concept, system, or procedure that is unique, advance the state of the community development art and have the potential for transferability, based on priority areas of national significance established each year by HUD.

The impact of the CDBG on helping meet the needs of the handicapped will be further analyzed as more experience with this new program is developed.

Section 701 Program

The section 701 program is designed to facilitate comprehensive planning for urban and rural development and to assist State and local governments to establish and improve planning staffs and techniques on an areawide basis. Eligible recipients include: States for Statewide planning and assistance to sub-State applicants applying to the states; large cities, urban counties, metropolitan clearinghouses, councils of government, Indian tribal bodies, and other governmental applicants with special planning needs that cannot otherwise be met.

Recipients are required to carry out an ongoing comprehensive planning process involving citizens and to develop a comprehensive plan which includes, as a minimum, a housing element and a land use element. The plan should address the needs of all citizens including the elderly and handicapped. Both elements must specify goals and measurable annual objectives, programs to accomplish the objectives and program evaluation criteria. In addition, land use policies must be coordinated at all governmental levels and functional planning must be integrated with comprehensive planning.

Activities which may be undertaken under Title IV include: natural resource planning; planning for physical land use facilities and service delivery systems including health, recreation, education, culture, transportation, utilities, fire protection, police; economic development planning including employment; equal opportunity planning, financial planning, evaluation and research.

The extent of citizen involvement is determined by the applicant according to its level of government and the nature of the activity under consideration, but the applicant must include a statement of the extent of citizen interaction in initiating as well as in responding to proposals, the extent of access to the decision-making process (i.e., involvement where major plans, policies and priorities or objectives are being determined). But citizen involvement does not require citizen concurrence in final determinations. The latter is the sole responsibility of the applicant.

Although the program serves all Americans, nothing in the statute is geared specifically toward the handicapped, nor is the administrative focus of the program in this direction. Because 701 grants are relatively small, there is less likelihood that a recipient will be able to study the needs of any special group in depth after meeting its mandatory comprehensive planning requirements, but, at the same time, this possibility is not precluded.

HUD Research Authority

Title V of the Housing and Urban Development Act of 1970 contains the Department's general research authority. Of special importance to the elderly and handicapped is the amendment which section 815 of the HCDA of 1974 made to Title V. This provision authorizes HUD to undertake special demonstrations to determine the housing design, housing structure, and housing-related facilities and amenities best suited to meet the needs of groups with special housing needs, including the "elderly and handicapped."

Housing the Handicapped Under the Various HUD Programs

Thus far, HUD has helped develop eight buildings designed wholly or in part for occupancy by handicapped or disabled persons. The lessons learned from their construction and operation can contribute meaningfully to accomplishment and progress in this field.

1. *Vistula Manor.* The first public housing for handicapped people was developed in Toledo, Ohio, in 1967. The building had 164 units, half to be occupied by the handicapped, half by the elderly. When it opened, only 17 units, or 10 percent, were occupied by handicapped persons. Since then the percentage has risen about 2 percent per year, so that even today fewer than 30 percent of the occupants are handicapped.

The building borrowed from designs of Dr. Howard Rusk's Rehabilitation Institute of New York. It featured lowered mirrors, sliding doors, shallow adjustable kitchen sinks, raised electrical outlets, a single water faucet control, a lap board 27 inches from the floor, and a bathtub with a seat at one end.

For several years six units were leased to Goodwill Industries located across a highway from the building, but neither the nearby presence of Goodwill nor the use of the apartment units developed any significant administrative links between the two.

2. *Pilgrim Tower.* This building was sponsored by the Pilgrim Lutheran Church of the Deaf in Los Angeles. Opened in 1968, the 112 units were built with a Section 202 direct loan with the aim of serving primarily the deaf and hard of hearing. Seven out of every eight current residents are deaf or hard of hearing. Architecturally, the building is designed essentially for the elderly.

The sponsor developed a significant signalling system that has been studied frequently since then. A control panel in the manager's office has indicators for each apartment. The panel turns on bright 6-inch high lights in each apartment that pulse on and off to indicate that the manager is signalling. Thus signalled, the resident turns the TV on to a closed channel and sees the manager signalling in the sign language of the deaf. In turn, residents can use the system for reverse signalling. Cost of the system was $22,000, which would have been less if installed during construction.

The large community room on the ground floor presents a graceful, fascinating spectacle, with residents signalling to each other in sign language in total silence. The degree of personal interaction is high, but the building's sound level is, of course, very low. All building personnel can use sign language.

3. *Center Park Apartments.* This Seattle, Washington, project opened in October, 1969, with 150 units, all for the handicapped. Here the architects carefully studied the lessons of Vistula Manor, adding a number of needed features. They provided elevators large enough to hold six wheelchairs; electric door plates for entrances; sink faucets at the side of the sink; adjustable sink counters; folding closet doors; higher electric outlets; emergency door pulls or wands; sliding bedroom and bathroom doors; lever door handles useful for arthritics and persons with hand, arm, and shoulder limitations; ball-bearing kitchen drawers.

This public housing project was additionally sponsored by the Seattle Handicapped Club, which ultimately helped fund a day center building adjacent to Center Park. This provides space and facilities for a wide range of community activities. There is an attached 18-car garage in Center Park, which is useful for residents with certain more limiting physical conditions.

4. *Walter B. Roberts Manor.* The only project for the blind under HUD programming was opened in 1969 in Omaha, Nebraska. It's a small, 42-unit building developed under the 221(d)(3) program in Omaha. The local Association for the Blind Sponsored this building, which is not design modified in any way to accommodate blind persons. The only items adaptive to the needs of the blind are pieces of Dymo tape placed next to the elevator buttons, and the washer and dryer keys with letters punched out in Braille. Names on mailboxes and on doors are punched out on the tape in English. The building, in essence, represents the philosophy that the blind should adapt to the techniques of the sighted, but the question could be raised whether this applies in a building devoted largely to the blind and the partially sighted. Thus, the further question is: Are there disabilities which, when grouped, produce additional difficulties in living?

5. *Highland Heights.* Highland Heights opened in 1970, under the aegis of the Fall River, Massachusetts, Housing Authority, and with the very strong assistance of the adjacent Hussey Hospital. This rehabilitation hospital helped provide an orthopedic orientation to the 208-unit building that has made it almost the housing component of a very effective, if older, medical facility. The two buildings are connected by an underground causeway, but more important, the hospital provides staffing for the building's clinic and medical services across a wide range for the residents. In turn, hospital patients, once they are rehabilitated, can be admitted to the building when vacancies occur.

Highland Heights has all the features of Center Park, but also provides handrails; lowered toilet seats convenient for wheelchair users; correctly located phone jacks; external elevator indicators; convenient light switches; smooth internal walls adequate sleeping areas in the efficiencies; and excellently designed public space.

Highland Heights also provides a unique emergency feature: When the emergency switch in the bedroom or bathroom is activated, a light goes on outside the apartment, a bell rings on the floor, and gongs go off in the ground floor clinic and the Rehab Clinic at the Hussey Hospital.

Even more significant than the design is the operation of the facility. It has become a focal point of community activity around the needs of the handicapped and elderly, with a host of community services pouring in to meet resident needs. So, for instance, the Fall River Council on Aging is located in Highland Heights. Hot meals programs, surplus commodities, aid referrals, all have emerged as a result of this presence. But in addition, the District Nursing Service, a Golden Age Club, social workers, therapists, a sewing group, arts and crafts, beauty and barber shop, choral and music groups, all have become part of resident services, whether provided by the Hussey Hospital, outside agency service, volunteers, or simply the normal social interaction that appears in a healthy social organism. Thus, despite the unusual range of physical limitations of the residents, their effective functioning is at a high level because of fine building programming.

6. *New Horizons.* This 100-unit project opened in July, 1972, in Fargo, North Dakota. The architects visited all the prior projects, analyzed all the design problems covered previously, and came up with what probably is the best physical structure for the handicapped in the United States. Rooms are ample, bathrooms are well laid out, shallow sinks are arranged so wheelchairs can be moved underneath comfortably; three central tub rooms are available for those who need assistance in bathing; smoke detectors and sprinkler system are installed; wall ovens provide a side-hinged door and a pull-out shelf below the door; and there is a pull-out cutting board, with a mixing bowl cutout. Only the elevators and the rehab room are small. Community facilities in the building are excellent and there is a full joint kitchen, from which a number of residents have hot meals delivered at lunch time, through a nearby meal service. A shopping center exists across the highway in front of the building. The parking area is entirely covered.

In brief, the building was designed primarily with the wheelchair bound person in mind, and, except for elevators, is a profound success.

7. *Independence Hall.* This is the largest of the projects for the handicapped, with 292 units on two floors. Opened in January, 1973, in Houston, Texas, it is a two-story, sprawling complex on a 10-acre site with garden-type, interconnected buildings, in the form of three diamonds, linked at their sides. Two long double

Housing Projects for the Handicapped

Name	Location	Sponsor	Year Opened	Cost	Size/ Group	Specially Served
Vistula Manor	400 Nebraska Avenue Toledo, Ohio 43602	Toledo Metropolitan Housing Authority	1967	$3,800,943	164	Handicapped and elderly
Pilgrim Tower	1233 South Vermoint Avenue Los Angeles, Calif. 90006	Pilgrim Lutheran Church of the Deaf	1968	$1,723,00	112	Deaf and hard of hearing elderly
Center Park Apartments	825 Yesler Way Seattle, Washington 98104	Seattle Housing Authority	1969	$2,596,421	150	Handicapped and elderly
Walter B. Roberts Manor	1024 South 32nd Street Omaha, Nebraska 68105	Omaha Association for the Blind	1969	$ 422,900	42	Blind and partially sighted elderly
Highland Heights	1197 Robeson Street Fall River, Mass. 02722	Fall River Housing Authority	1970	$2,942,204	208	Handicapped and elderly
New Horizons	2525 North Broadway Fargo, North Dakota 58102	Fargo Housing Authority	1972	$1,947,875	100	Handicapped
Independence Hall	Airline Dr. at Burress St. Houston, Texas	Goodwill Industries	1973	$3,179,800	292	Handicapped and elderly
Creative Living	445 W. 8th Avenue Columbus, Ohio 43215	Creative Living, Inc.	1974	$ 333,100	18	Quadri- and paraplegics

ramps, centrally located, lead to the second floor, but there are also two small elevators at each end of the complex. The project includes level door handles, floor plate openers at several locations for public doors, drive-in showers with support bars, wide doors throughout, emergency buzzer system to the main office, shallow kitchen sinks with space underneath for wheelchairs, low kitchen shelving, under-the-burner oven, crafts and workshop space, library, and sewing room.

Independence Hall is unique in that Goodwill Industries sponsored the project. It has close ties to the Goodwill plant. Many employees are housed and, most significant, everyone who runs the building is handicapped, including administrative, clerical, and maintenance staffs. There is also a strong link to available hospital and medical services, to say nothing of the normal social services utilized by the Goodwill process.

8. *Creative Living.* This building in Columbus, Ohio, is unique as the only one designed for paraplegics and quadriplegics. Built on land leased from Battelle Memorial Institute for $1 a year, this Section 236 project opened in October, 1974, and is a barrier-free 18-unit one-story building designed for the wheelchair-bound person. Doors are pressure-activated; there are special plumbing features; kitchen cabinets are 30 to 40 inches off the floor; electrical outlets are about 30 inches high; door openings are never less than 32 inches wide; clothes racks no higher than 48 inches.

One section of the building has a dayroom for students from the adjacent Ohio State University Medical School who work as attendants on an hourly basis, serving the mobility needs of the residents. These range from toileting and dressing in the morning and evening to turning at night to avoid bedsores.

Creative Living is a by-product of a particularly fine Department of Physical Medicine at Ohio State. Here paraplegic and quadriplegic patients are rehabilitated, use powered wheelchairs and speaker-phones, press buttons, dial phones, dictate letters, and perform all kinds of light office and daily activity. It is a tribute to brains, ingenuity, persistence, professional skill, and above all, superhuman faith.

c. *Research into housing the handicapped.* The existing supply of housing units for the handicapped, most of which are included in projects for the elderly, only begins to meet the housing needs of our handicapped population. Furthermore, research is needed to develop an understanding of the needs which the handicapped have in making use of the built environment. There also is a need to evaluate the function and designs of the units already constructed in meeting the housing needs of the handicapped. HUD's Office of Policy Development and Research (PD&R) has begun a program of research along both lines.

The lack of housing which meets their needs denies handicapped persons the independent life they want and are capable of living. This situation is exacerbated by restrictions on the use of outdoor space and a lack of accessibility to public transportation.

PD&R has undertaken several research efforts leading to a built environment that will allow the handicapped person to be integrated into society to the extent he or she desires and is capable of, with a minimum of architectural barriers or other man-made impediments. HUD has sought and received the advice and guidance of the Department of Health, Education, and Welfare, the Architectural and Transportation Barriers Compliance Board, the Committee on Barrier Free-Design of the President's Committee on Employment of the Handicapped, the American Institute of Architects, and the National Society for Crippled Children and Adults.

To date, PD&R has completed two fairly recent studies. The first took place in one of the eight HUD-sponsored buildings for the handicapped, Highland Heights in Fall River, Massachusetts. The Fall River Housing Authority completed a study in 1972 of the effects of residence in a sheltered but non-institutional housing situation on their population of severely handicapped adults. Results showed that such an environment proved to be a positive experience, and that over the short run residents improved in terms of morale and physical functioning.

Because HUD believes that these individuals could better utilize environments thoughtfully designed to accommodate their limitations, the American Society of Landscape Architects Foundation (ASLAF) was awarded a two-year $107,000 contract to develop a guide to barrier-free site design. The results of this study are available from HUD and the Government Printing Office in two separate volumes.

One is an illustrated manual for environmental designers faced with the need to design accessible sites for both public and private facilities. This guide, *Barrier-free Site Design*, covers the design and planning of site features such as parking lots, walks, ramps, play areas, pools, street furniture, lighting, signage, and restrooms.

The second, available late this fall, is a compendium of existing design criteria and construction standards used in the project. It provides to the designer comprehensive information about existing barrier-free related legislation, standards, guidelines, etc.

PD&R also currently has several projects related to the needs of the disabled under way. In 1961, the American National Standards Institute (ANSI) affirmed a set of standards (ANSI A117.1) for making buildings accessible to and usable by the physically handicapped. Since that time the HUD Minimum Property Standards, Public Law 90-480, and many state accessibility laws and local building codes have specifically referenced the ANSI Standard or have been based upon it. However, as stated in a letter to HUD from the President's Committee on Employment of the Handicapped, one of the sponsors of the original standard, ". . . it is widely recognized by professional designers and by administrators that the document is inadequate in defining accessible multifamily housing. Kitchen, bathroom, and living space design specifications are not included. Code authorities, legislators, housing developers, and city planners are constantly requesting such information. . . ."

In response to a request from the President's Committee and from the National Society for Crippled Children and Adults—the sponsors of the original standard—HUD agreed to begin developing a revised and expanded ANSI standard which would cover public buildings, dwelling units, and related exterior spaces. The School of Architecture at Syracuse University was chosen to administer the program of research and testing necessary for developing the new standard.

The results of the two-year, $256,000 effort which will be completed in June, 1976, will be a performance standard that emphasizes the concept of adaptability. It will reflect the state of the art in accessibility not only in the United States, but also in the countries in Northern Europe, which have a great deal more experience than the United States in housing for handicapped persons and which have met with great success in the use of performance standards and in the integration of the handicapped into their community. The new standard will be submitted to ANSI for adoption and to HUD for inclusion in the Minimum Property Standards.

The new ANSI Standard also will incorporate the results of the recently completed site design study by the American Society of Landscape Architects Foundation.

The first year's work on the ANSI project resulted in a comprehensive state-of-the-art review which is currently being evaluated for possible publication.

St. Andrews Presbyterian College came to HUD with a problem and with a potential solution to be tested. Located on a barrier-free campus in Laurinburg, North Carolina, the college has had considerable experience and success in educating the severely handicapped and in placing them in jobs. However, many of their graduates were unable to accept the positions offered because of a lack of suitable housing within commuting distance. The school adapted four standard mobile homes from the surplus disaster relief stock for occupancy by handicapped students. At the end of the two-year $204,000 project, a fifth demonstration unit incorporating as many of the features as feasible will be available for display.

The project team is giving special attention to safety factors, and is also doing psychological testing to determine the effects of this sudden increase in independence and in responsibility upon persons who previously led relatively sheltered, protected lives. At first the students living in the demonstration units experienced what Dean Rodger Decker, project director, describes as a "halo effect." Because almost all of the St. Andrews students live in campus dormitories and the four students in the demonstration mobile homes are living independently, the handicapped students were among the most popular on campus! All the students are delighted with their homes and have experienced little or no problems with them.

Fall River is currently undertaking a three-year, $97,000 follow-up study which increases the size of the survey sample so that it can be subdivided by type and degree of disability. This phase of the research will seek to determine if persons with different types or degrees of disability benefit differently from residence at Highland Heights. The results of the study will enable managers to develop a rational set of tenant selection procedures for environments such as Highland Heights. An additional, companion piece of research supported by HEW is also looking at the original sample of respondents over a five-year period to see whether the short-term results found by the initial study continue over longer periods of time.

HUD intends to continue its research on improved housing and community environments for the handicapped. A study of the effects of integrating the handicapped into all housing, not just elderly housing or buildings designed for the handicapped, is planned for the next two years. An evaluation of small group homes for the developmentally disabled will also be sponsored. In addition, HUD hopes to sponsor demonstrations and evaluations of the design guidelines developed by the previously described American Society of Landscape Architects Foundation study.

d. *HUD Minumum Property Standards (MPS) for handicapped persons.* Although Public Law 90-480 was implemented in HUD's programs by Part 40, Title 24 of the Code of Federal Regulations and by revisions to handbooks for various programs–Low-Rent Public Housing, College Housing, Open Space and Neighborhood Facilities–the documents most affecting the design and construction of HUD-related residential projects probably are the Minimum Property Standards.

Through the Minimum Property Standards HUD requires mortgage-insured multifamily projects to be accessible to the physically handicapped on the same basis as public housing, even though Public Law 90-480 does not apply to such projects. Also, all housing for elderly must be accessible.

The mandatory MPS, consisting of three volumes, one for single family housing, one for multifamily housing, and a third for nursing and intermediate care facilities, are supplemented by a nonmandatory volume titled *Manual of Acceptable Practices.* These criteria are intended to provide a sound basis for determining the acceptability of HUD-associated housing. They are used by the Farmers Home Administration, Veterans Administration, and some military housing programs.

Originally the MPS were couched in prescriptive language and were directed to specific programs. In 1974 they were reissued. The new documents are written in performance language to allow greater design and construction freedom to meet local needs and to promote more innovative design. They now relate to building types rather than to specific programs. In this way the three new volumes were able to replace eleven sets of program-oriented standards. Hence, HUD does not maintain a separate book or set of criteria for projects of housing for handicapped persons. Material pertinent to design for handicapped persons is contained in all three books—depending on whether the building type used is a detached dwelling, row or apartment house, institutional type building, or other. This distribution of criteria is consistent with the conviction that handicapped individuals should not be isolated into separate projects especially designed for them, but that they should be integrated into housing for nonhandicapped families.

By not placing criteria for handicapped persons in a separate MPS, HUD obviated the need to repeat all of the criteria for construction materials and workmanship and much of the site and space planning and other design criteria which are the same regardless of the physical and mental attributes of a project's occupants.

HUD believes the distribution of specific critera for handicapped persons throughout the three MPS's is more effective than making a single reference to American National Standards Institute A117.1 and stating that all facilities must comply with it. Thus where criteria for amount, size, and location of parking are given for family housing, the corresponding standards for handicapped persons are given. Where criteria for walks are given, corresponding special requirements for handicapped persons are given, such as maximum gradients and prohibition of steps for stepped ramps between a principal entrance and a vehicular unloading zone. HUD does not repeat criteria which are the same for handicapped and nonhandicapped persons. For example, slip resistant surfaces are required on all walks.

This arrangement permits HUD to invoke A117.1 for a specific feature when that standard is adequate and to set up its own criteria when it is not. A117.1 was written for public, not residential buildings, so it contains no data on kitchen design, showers, bathtubs, and such life safety features as number of exits, flame spread, or emergency power. These items are detailed in the MPS.

Other criteria for handicapped persons in excess of material in A117.1 which are found in the multifamily MPS includes accessibility to beds, night lights, minimum hall widths for wheelchair users, prohibition of abrasive wall finishes, nonscald valves in showers, and emergency lighting systems. This material is supplemented by recommendations in the Manual of Acceptable Practices pertinent to space allocation for social, recreational, and other common functions, wheelchair dimensions, clearances in common dining areas for wheelchair occupants, and entrance facilities—automatic door opener, view panels, and vestibules. In short, HUD criteria are more complete and exhaustive than those given in A117.1. In addition, they are constantly being reviewed and updated to take advantage of the most recent technological advances, experience, and research—both foreign and domestic.

Department of Health, Education, and Welfare (HEW)

A. *Authorization*. HEW has no specific authorization to provide housing for the handicapped.

B. *Purpose*. Under the public assistance titles of the Social Security Act, grants to states are provided for financial assistance to needy families with children, and in Guam, Puerto Rico, and the Virgin Islands to needy aged, blind, and disabled for food and shelter, among other things. These programs are incidental to the other purposes of the acts quoted.

C. *Eligibility*. Financial assistance is available only to those eligible for the financial assistance under the public assistance titles. Only the staffs of Indian health facilities are provided housing.

D. *Scope*. No data are collected on the housing and living arrangements that arise incidental to these acts since the individuals involved make their own housing arrangements.

E. *Standards*. Under the assistance provisions of the Social Security Act, there are no minimum housing standards for recipients of the assistance, and there is no specific requirement that housing be accessible to the physically handicapped.

ANSI standards, supplemented by HEW criteria, are used to provide accessibility for the physically handicapped who may be living or working at the Indian health facilities.

Veterans Administration (VA)

A. *VA Home Loans*

a. *Authorization.* Chapter 37, Title 38, U.S. Code, contains the authorization for the VA Home Loan Program or, as it is most commonly called, the "GI Home Loan Program." The objective of the program is to assist veterans of World War II, the Korean and post-Korean conflict periods, certain servicemen, and unremarried widows of veterans to obtain credit for the purchase, construction, or improvement of homes on more liberal terms than is generally available to nonveterans.

b. *Purpose.* VA may guarantee or insure home loans made to eligible veterans for any one of these purposes: (a) to buy or build a home; (b) build a farmhouse on land he owns; (c) repair, alter, or improve a farmhouse or other dwelling he owns; (d) buy a one-family residential unit in an approved condominium housing project; (e) refinance a mortgage or other lien on a house owned by the veteran. VA may also guarantee loans for the purchase of new and used mobile homes.

c. *Scope.* Since the inception of the program in 1944, VA has guaranteed approximately 9,000,000 home loans for an aggreate principal amount exceeding $109 billion.

d. *Eligibility.* While VA may guarantee any loan to all classes of eligible veterans, it may insure loans made only to World War II and to Korean conflict veterans by lenders subject to state or Federal examination and supervision. In all cases the borrower must own and occupy, as his or her home, the housing unit securing the loan. The nature and condition of the unit must be suitable for dwelling, and the loan may not exceed a VA determined reasonable value of the property.

The applicant eligibility criteria for "GI Home Loans" is: (a) veterans of World War II or the Korean conflict who served on active duty 90 days or more and were discharged or released under conditions other than dishonorable; (b) veterans who served on active duty 181 days or more, part of which occurred after January 31, 1955, and who were discharged or released under conditions other than dishonorable; (c) any veteran in the above classes with less service but discharged with a service connected disability; (d) unremarried widows and widowers of otherwise eligible veterans who died in service or whose deaths were attributable to service connected disabilities; (e) service personnel who have served at least 181 days in active duty status; (f) spouses of members of the Armed Forces serving on active duty, listed as missing in action, or as prisoners of war and who have been so listed 90 days or more.

e. *Standards.* VA has adopted as its construction standards the HUD Minimum Property Standards, One and Two Family Dwellings, 4900.1.

B. *Specially adapted housing.*

a. *Authorization.* The authorization for the VA to assist certain disabled veterans in acquiring suitable housing units with special fixtures and facilities made necessary by the nature of the veteran's disability is contained in Chapter 21, Title 38, U.S. Code.

b. *Purpose.* The VA Specially Adapted Housing Program provides 50 percent of the cost to the veteran of the housing unit, land, fixtures, and allowable expense, not to exceed $25,000. The money may be used to assist in (a) construction of a suitable home on land to be acquired by the veteran; or (b) construction of a home on suitable land owned by the veteran; or (c) remodeling an existing home if it can be sutiably adapted; or (d) application against an outstanding mortgage for a specially adapted home owned by the veteran.

In computing the amount of a grant payable to the veteran, the housing unit cost may include incidental expenses, such as connections or extensions to public facilities, customary attorneys, architect, loan closing, and other service fees. Restrictions on the use of a grant are: (a) if a loan is necessary to supplement a grant, monthly repayments and the cost of maintaining the housing unit must be a proper relation to the veteran's present and prospective income; (b) the housing unit must be suitable for the veteran's special dwelling needs; and (c) the veteran's acquired interest in, or title to, the property must meet standards generally acceptable to informed real estate market participants in the locality of the property.

c. *Scope.* During the 27 years of the VA specially adapted housing program existence, more than 13,500 veterans have been aided at an expense of approximately $154 million.

d. *Eligibility.* In order to be eligible for a specially adapted housing grant, a veteran must have a permanent, total, and compensable disability, based on service after April 20, 1898, due to (a) loss or loss of use of both lower extremities to an extent precluding locomotion without braces, cane, crutches, or wheelchair; or (b) blindness in both eyes, having only light perception, plus loss or loss of use of one lower extremity; or (c) loss of use of one lower extremity with residuals or organic disease or injury affecting balance or propulsion so as to preclude locomotion without resort to a wheelchair. It must be medically feasible for the veteran to reside in the proposed or existing housing unit and in the locality.

e. *Standards.* When it is determined that it is medically feasible for an eligible veteran to reside in a specially adapted home, the veteran is contacted by a representative from the local VA office who is a specialist in the field of specially adapted housing to counsel and make suggestions and recommendations to the veteran at every stage to help him/her obtain a specially adapted house. The counsel includes providing sample housing plans and helping the veteran get architectural services, contractors, bids, and any other related service necessary to assure that a satisfactory specially adapted house is provided. As a result of its experience with specially adapted housing, the VA has developed the following special requirements which, of course, may be modified to meet individual needs:

(a) At least two ramps suitable for egress, one of which shall be located so as not to expose the veteran to a potential fire hazard, such as placement necessitating passage through a kitchen or garage or utility room containing heating equipment. Ramps must be constructed of fireproof material, shall be permanently installed, shall be treated to prevent slipping when wet, and the slope shall not exceed 8 percent. The minimum width acceptable is 3 feet, 6 inches, and the railings must be provided if the height and length of the ramp indicate any question of a hazard. Each ramp must be headed at the top by a level platform which is freely accessible from the ramp. Ramp platforms must be generous in an area to allow for turning the wheelchair and equipped with protective railings if the height of the platform presents a potential hazard. There shall be no difference in elevation between the interior floor level and point of ramp entry.

(b) All doorways shall be at least 36 inches wide.

(c) Halls shall be a minimum of 4 feet wide.

(d) A garage or carport should be of sufficient width to allow unrestricted wheelchair maneuverability alongside the car.

(e) Passageways between the home proper and the garage or carport should be sheltered to prevent exposure of the veteran to inclement weather.

(f) At least one bathroom convenient to the veteran's bedroom should contain very generous floor areas providing free wheelchair maneuverability, with placement of all fixtures in a manner permitting the veteran unimpeded access to each fixture. Bathroom flooring material should be nonslip under both wet and dry conditions. Wash basins of the hung type, rather than pedestal, shall be affixed at a height enabling the wheelchair to ride below the fixture to allow close approach for washing and shaving convenience. Wash basin drainpipes should be installed with the view to minimizing the possibility of abrasions. A mirror at suitable level of use from the wheelchair must be provided and may be achieved by a lowered medicine cabinet to which the veteran is to have access. Faucets for the tub and shower also must be accessible from the wheelchair for water temperature control before, as well as during, immersion. Adequate thermostatic controls should be installed to avoid sudden change in the water temperature. Adequate grab bars, capable of bearing weight and conveniently placed, must be installed for the tub and shower. Stall showers must be large enough to allow for a built-in bench, if desired. There shall be no curb between the stall and bathroom (floor drain can be placed in a back corner of the stall), and the shower stall opening must comply with the width requirement. The toilet fixture or seat should be raised, if necessary, for the veteran's convenience; armrests, installed in a manner to support the veteran's weight in transferring, must be included, and provision should be made for a suitable back support. Where veterans have a decided preference for a shower installation, serious thought nevertheless should be given to a tub installation as well.

(g) All hot water pipes, steampipes, room radiators, or similar items which may constitute a hazard insofar as burns, abrasions, etc., are concerned, should be concealed or properly covered.

(h) Wall switches and electrical outlets should be within reach from the wheelchair—minimum 18 inches and maximum 48 inches from the floor. Fuse boxes, thermostats, and other utility and appliance controls should be within reach from the wheelchair. Windows should be operable from the wheelchair. Automatically operated garage doors are a great convenience. Direct control activated by key or button is more satisfactory than remote control by radio or light beam.

(i) An automatic smoke detector, which may be a single-station alarm device, shall be installed in each living unit near the bedrooms. Such detectors shall comply with the standards of the Underwriters' Laboratories Standard No. 168 for photoelectric type and No. 167 for the ionization type. Detectors shall be labeled indicating compliance with the above standards. All smoke detectors shall operate from the dwelling's electrical circuit without a disconnecting wall switch and be permanently mounted to a standard electrical outlet or junction box on or adjacent to the ceiling.

(j) Carpeting and rugs impede wheelchair maneuverability. Accordingly, installation of carpeting will not be approved as a general rule. Requests for waiver to permit installation of low pile, closely knit carpet will be considered on a individual basis. Such requests must be supported by a statement in writing from a VA physician as to the veteran's ability to maneuver on it or that it will not impede his/her mobility.

Department of Agriculture

The Farmers Home Administration (FmHA) does not have a housing program specifically for the handicapped. It does, however, administer three housing programs which may be included in any report on the status of issues and direction of housing for the physically handicapped. FmHA does not have records as to the number of physically handicapped individuals occupying individual or rental housing units financed by the agency.

A. *Low to moderate income housing loans*

a. *Authorization.* These loans are authorized under Section 502 of Title V of the Housing Act of 1949. The objective of this loan program is to assist rural families to obtain decent, safe, and sanitary housing and related facilities. These loans are made to eligible applicants to buy, build, or improve homes located in rural areas; to provide necessary and adequate sewage disposal facilities for the applicant and his family; and to buy a site on which to place a dwelling for the applicant's own use. Housing debts may be refinanced only under certain circumstances.

b. *Purpose.* Dwellings financed under this program for a family with low or moderate income must be modest in size, design, and cost. In addition, the applicant must be without sufficient resources to provide, on his own account, the necessary housing or related facilities and be unable to secure the necessary credit from other sources upon terms and conditions which he reasonably could be expected to fulfill.

c. *Eligibility.* To be eligible for a Section 502 rural housing loan, the applicant must be the owner or when the loan is closed become the owner of a home in a rural area. He must also be a citizen of the United States or reside in the United States after having been legally admitted for permanent residency, have adequate and dependably available income to meet his operating and family living expenses including taxes, insurance, maintenance, and repayment on debts including the proposed loans. Interest credits may, under certain conditions, be granted to lower income families which will reduce the effective interest credit rate paid to as low as one percent depending on the amount of the loan and the size and income of the family.

d. *Scope.* During fiscal year 1976, FmHA expects to process more than 100,000 initial and subsequent Section 502 loans for approximately $1.927 billion compared to last year's $1.9 billion.

B. *Very low income housing repair loans*

a. *Authorization.* These loans are authorized under Section 504 of Title V of the Housing Act of 1949, as amended.

b. *Purpose.* The loans give very low income rural homeowners an opportunity to make essential minor repairs to their homes to make them safe and to remove health hazards to the family or the community. This could include repairs to the foundation, roof, or basic structure as well as making the housing more convenient for a physically handicapped person. Funds may be included in these loans to provide a water and waste disposal system for the dwelling.

c. *Eligibility.* The maximum loan under this program is $5,000, which can be repaid in up to 20 years. The interest rate is one percent per annum. Applicants must own and occupy the dwelling and be without sufficient income to qualify for a Section 502 loan yet must have sufficient income to repay the loan.

d. *Scope.* FmHA has an allotment of $20 million available for such loans and has obligated approximately $4.5 million in loans to approximately 2,500 applicants during each of the past two fiscal years.

C. *Rural rental housing loans*

a. *Authorization.* FmHA is authorized under Section 515 of Title V of the Housing Act of 1949 to provide economically designed and constructed rental housing and related facilities suitable for independent living or rural residents.

b. *Purpose.* The loans can be used to construct, purchase, improve, or repair rental or cooperative housing. Housing may consist of apartment buildings, duplex units, or individual detached houses. Funds may also be used to provide recreational and service facilities appropriate for use in connection with the housing and to buy and improve the land on which the buildings are to be located.

c. *Eligibility.* Applicants may be individuals, consumer cooperatives, trusts, nonprofit corporations, profit corporations, associations, state or local public agencies, partnerships, or limited partnerships. With the exception of state or local public agency, they must be unable to provide the housing from their own resources or with credit obtained from private sources. Applicants must, however, be able to assume the obligations of the loan, furnish adequate security, and have ability to provide management and to maintain and operate the housing for the purpose for which the loan is made.

d. *Scope.* There is an authorization for $146 million to be expended for rural rental housing loans in fiscal year 1976 as compared to $296 million in fiscal year 1975.

Department of Defense

A. *Authorization.* Annual Military Construction Authorization Acts

B. *Purpose.* The Department of Defense (DoD) programs for housing may be divided into two general categories, housing for bachelor personnel and housing for married personnel.

Housing for bachelor personnel, enlisted and commissioned, is not designed to be accessible to the handicapped. Public Law 90-480 excluded from its provisions "... any building or facility on a military installation designed and constructed primarily for use by able-bodied military personnel ..." and, as these facilities are designed and constructed exclusively for able-bodied military personnel, they are not covered by the law.

Housing for married personnel also is not specifically designed to be accessible to the handicapped. The ratio of handicapped to nonhandicapped living in military family housing may be somewhat less than that of the general population since at least one member of all such families would be an able-bodied military person. Even the ratio of handicapped to nonhandicapped among military dependents would normally be less than the general population. This is so because the retirement age for military personnel ranges from under forty years to about the mid-fifties. Thus, the aged as a group are not found among the families occupying military housing. Nevertheless, there are some handicapped individuals among military families. When a family with a handicapped member is assigned to a DoD owned home, DoD normally handles any indicated modification to the house at that time. This is of course an option which is available to the military which might not be economically feasible for a family seeking to buy a private dwelling on the open market.

C. *Eligibility.* Military housing programs are limited programs serving very specialized populations. They are, therefore, not directly comparable with the overall housing market.

D. *Scope.* The scope of these programs varies from year to year depending on their overall program priority. The fiscal year 1976 program will have about 3,000 family units and the bachelor housing program foresees the construction of new housing spaces for approximately 26,000 personnel. Future programs are expected to be comparable. However, a gradual shift of emphasis away from new construction to modernization and improvement of existing older units is expected.

Normally DoD does not built houses for civilian employees. In the case of military necessity where a key or essential civilian employee is required to live on a particular installation, that employee may be assigned to a military house. Those situations do not frequently occur.

E. *Standards.* General application of the principles of design for the handicapped to the military housing programs would result in less than average, and, in the case of bachelor housing, no benefit to the handicapped.

However, there are a number of design proposals that have been put forth to assist both the handicapped and nonhandicapped individual. Typical of these would be the elimination of door knobs and latches in favor of levers or other devices more easily usable by all persons. This, a very productive area for assistance to the handicapped, exists in the promotion of such design for all housing.

Appendix D — Of Housing Report

Numbers of People with Physical Limitations[1]

Activity Limitations	
None	4,650,000
Limitation in one or more activities	12,928,000
lifting, carry weights	7,420,000
stooping kneeling, crouching	9,322,000
using stairs or includes	7,747,000
walking	6,617,000
reaching	3,650,000
handing and fingering	2,451,000
writing	2,434,000
Unknown	
Personal Care Activities	
No help needed	16,485,000
Needs help (miscellaneous)	1,259,000
in dressing	1,112,000
in personal hygiene	698,000
in eating	281,000
Unknown	10,000
Mobility Limitations	
None	15,645,000
Limitation (miscellaneous)	1,851,000
needs help for transportation	854,000
needs help to go outside home	571,000
confined to home	288,000
confined to bed	137,000
Unknown	257,000
Mechanical Aids	
Non used	15,816,000
Used aids	1,936,000
orthopedic	1,586,000
Sensory Limitations	
None	13,526,000
Limitations	4,099,000
vision impairment	2,820,000
hearing impairment	1,061,000
speech impairment	730,000
Unknown	128,000

Number of People with Physical Disorders[2]

Musculo-skeletal disorders	5,492,000
arthritis or rheumatism	2,201,000
back or spine impairments	1,952,000
loss or impairment of limbs	874,000
other musculo-skeletal conditions	465,000
Cardio-vascular disorders	4,408,000
heart trouble	2,018,000
high blood pressure	966,000
hermorrhoids	204,000
varicose veins	407,000
other cardio-vascular conditions	813,000
Respirator and related disorders	1,986,000
asthma	677,000
other allergies	489,000
cronic bronchitis	220,000
emphysema	149,000
tuberculosis	168,000
other respiratory conditions	283,000
Digestive disorders	1,284,000
hernia or rupture	339,000
stomach ulcer	517,000
other digestive conditions	428,000
Urogenital disorders	451,000
Endocrine-metabolic disorders	690,000
diabetes	487,000
thyroid	203,000
Mental disorders	1,114,000
mental illness-nervous trouble	902,000
mental retardation	212,000
Nervous system disorders	922,000
epilepsy	171,000
multiple aclerosis	102,000
paralysis	184,000
stroke	257,000
other nervious system conditions	208,000
Sense organs disorders	620,000
visual impairments	433,000
deafness	187,000
Neoplasma	301,000
Other and not specified conditions	487,000

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[1] Prevalence of Selected Impairments, United States, July, 1963; June 1965.

[2] Chronic Conditions and Limitations of Activity and Mobility, United States, spring, 1966

Numbers of People with Physical Limitations[3]

Population Groups	All Ages	Under 17	17-44	45-64	65 & over
TOTAL POPULATION	199,843,000	66,711,000	72,833,000	41,302,000	18,997,000
With Activity Limitations	23,630,000	1,820,000	5,643,000	8,163,000	8,003,000
With major Activity Limitations	17,747,000	873,000	3,573,000	6,358,000	6,943,000

Number of People with Physical Limitations due to Chronic Conditions[4]

Selected Chronic Conditions	All ages	Under 45	45-64 years	65 + years
Heart Condition	3,606,000	380,000	1,430,000	1,789,000
Hypertension, without heart involvement	1,187,000	129,000	487,000	571,000
Arthritis and Rheumatism	3,248,000	331,000	1,267,000	1,650,000
Other disease of muscles, bones and joints	781,000	318,000	339,000	124,000
Paralysis, complete or partial	925,000	286,000	278,000	362,000
Impairmants (except paralysis and absence) of back and spine	1,796,000	796,000	682,000	318,000
Impairments (except paralysis and absence) of upper extremities and shoulders	410,000	153,000	162,000	95,000
Impairments (except paralysis and absence) of lower extremites and hips	1,351,000	475,000	433,000	443,000

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[3] Current Estimates from the Health Interview Survey, United States, 1970.

[4] Chronic Conditions and Limitations of Activity and Mobility, United States, July 1965, June 1967.

Numbers of People with Mobility Limitations[5]

Capacity Limitations	Number
No mobility limitations	15,645,000
Limitations	1,850,000
Needs help for transportation	854,000
Needs help to go outside home	571,000
Confined to home	288,000
Confined to bed	137,000
Unknown	257,000

[5] Prevalence of Selected Impairments, Unites States, July 1963; June 1965.

Abilities of Audially-Impaired People to Work[6]

Ability to Work	All Ages	Under 45 yrs.	45-64 yrs.	65 yrs./over
With limitation	8,549,000	127,000	115,000	219,000
No major activity	145,000	N/A	N/A	108,000
Limited in amount or kind of major activity	219,000	70,000	63,000	86,000
Limited/not major	97,000	41,000	30,000	N/A
No limits on activity	8,088,000	2,037,000	2,558,000	3,493,000

[6] Ibid.

Numbers of People with Audio Impairments[7]

Both Sexes	Number
ALL AGES	8,549,000
Under 25 yrs.	823,000
25-44 yrs.	1,341,000
45-64 yrs.	2,673,000
65-74 yrs.	1,808,000
75 yrs. and over	1,904,000

[7] Ibid.

Numbers of Visually Impaired People[8]

Visual Impairments	All Ages	Under 25	25-44	45-64	65-74	75 & over
ALL VISUAL IMPAIRMENTS	5,390,000	648,000	744,000	1,499,000	1,126,000	1,373,000
Severe Visual Impairments	1,227,000	53,000	66,000	259,000	263,000	585,000
Other Visual Impairments	4,163,000	595,000	678,000	1,240,000	863,000	788,000

[8] Ibid.

Numbers of People Using Special Aids[9]

Special Aid	All Ages	Under 45	Under 15	15-44	45-64	65 +
Special Shoes	2,377,000	1,620,000	1,263,000	357,000	444,000	313,000
Cane or Walking Stick	2,156,000	94,000	7,000	87,000	444,000	1,618,000
Brace						
Leg or Foot	233,000	152,000	88,000	65,000		
Other	869,000	365,000	61,000	304,000	324,000	180,000
Crutches	443,00	147,000	27,000	120,000	158,000	137,000
Wheelchair	409,000	100,000	24,000	76,000	94,000	215,000
Walker	404,000	N/A	N/A	N/A	57,000	329,000
Artificial Limb						
Leg or Foot	126,000	N/A	N/A	N/A	57,000	N/A
Arm or Hand	46,000	N/A	N/A	N/A	N/A	N/A

[9] National Center for Health Statistics, 1969.

Appendix C

Transportation For The Handicapped
Selected References

Transportation For The Handicapped

Selected References

Bibliographic List No. 8

April 1975

INTRODUCTION

This is a selected, partially annotated listing of journal articles, papers and reports on the subject of transportation for the handicapped, updating Bibliographic List No. 1 issued by the Department of Transportation Library in November 1969.

Time covered: 1969–1974.

Scope: Transportation for the physically handicapped and elderly. Material on mobility and assistive aids thereto is selectively included as considered relevant.

Arrangement: Subject categories, individual, corporate source and geographic indexes.

Sources consulted:

AEROSPACE MEDICINE AND BIOLOGY, 1970 cumu. v.–Supp. 134, Nov. 1974. Published by the U.S. National Aeronautics and Space Administration. Springfield, Va., National Technical Information Service, 1970–1974.

AIR UNIVERSITY LIBRARY INDEX TO MILITARY PERIODICALS, v. 20 no. 4, Jan–Dec 1969–v. 25, no. 4, Jan–Dec 1974. Maxwell Air Force Base, Ala., Air University Library, 1969–1974.

APPLIED SCIENCE AND TECHNOLOGY INDEX, 1969 cumu. v.–v. 62, no. 11, Dec. 1974. New York, Wilson, 1969–1974.

BRITISH TECHNOLOGY INDEX, 1969 cumu. v.–v. 13 no. 12, Dec 1974. London, The Library Association, 1969–1974.

BUSINESS PERIODICALS INDEX, Jul. 69–Jun 70 cumu. v.–v. 17 no. 2, Oct. 1974. New York, Wilson, 1969–1974.

CATALOG OF THE TRANSPORTATION CENTER LIBRARY. Published by the Northwestern University Transportation Center. Boston, Hall, 1972.

CUMULATIVE BOOK INDEX, WORLD LIST OF BOOKS IN THE ENGLISH LANGUAGE, 1969 cumu. v.–v. 77 no. 11, 1974. New York, Wilson, 1969–1974.

CURRENT LITERATURE IN TRAFFIC AND TRANSPORTATION, v. 10, 1969–v. 15, 1974. Evanston, Ill., Northwestern University Transportation Center Library, 1969–1974.

GOVERNMENT REPORTS INDEX, 1969 cumu. v.–v. 74 no. 26, Dec 27, 1974. Springfield, Va., National Technical Information Service, 1969–1974.

INDEX MEDICUS, 1969 cumu. v.–v. 15 no. 12, Dec 1974. Published by the U.S. National Library of Medicine. Washington, D.C., U.S. Government Printing Office, 1969–1974.

LIBRARY OF CONGRESS CATALOG, BOOKS: SUBJECTS: A CUMULATIVE LIST OF WORKS REPRESENTED BY LIBRARY OF CONGRESS PRINTED CARDS, 1970–Jul–Sep 1974. Washington, D.C., U.S. Library of Congress, 1970–1974.

MONTHLY CATALOG OF UNITED STATES GOVERNMENT PUBLICATIONS, 1969 cumu. v.–Oct. 1974. Washington, D.C., U.S. Government Printing Office, 1969–1974.

NEW YORK TIMES INDEX, 1969 cumu. v.–Dec 16–31 1974. New York, N.Y. Times Company, 1969–1974.

PUBLIC AFFAIRS INFORMATION SERVICE BULLETIN, v. 55, Oct. 68–Sep 69–v. 61 no. 12, Jan 4 1975. New York, Public Affairs Information Service, Inc., 1969–1975.

READER'S GUIDE TO PERIODICAL LITERATURE, v. 29, May 69–Feb 70–v. 74 no. 19, Dec 25, 1974. New York, Wilson, 1969–1974.

SOCIAL SCIENCES INDEX, v. 1 no. 1–v. 1 no. 3, 1974. New York, Wilson, 1974.

SOCIAL SCIENCES AND HUMANITIES INDEX, v. 23, Apr 69–Mar 70–v. 27, Apr 73–Mar 74. New York, Wilson, 1969–1974.

Availability of publications:

Those publications not in the Department of Transportation Library are indicated by an asterisk preceding the citation. The staff of this library will gladly assist DOT personnel in locating desired items through interlibrary loan.

Individuals outside the Department of Transportation are urged to consult their local libraries for assistance. The Department of Transportation Library does not supply copies of publications cited in this bibliography.

Certain publications are available for purchase from the following sources:

National Technical Information Service (NTIS) 5285 Port Royal Road Springfield, Virginia 22151	Order by AD- or PB-number
Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402	Order by GPO number

Compiled by:
Anne B. La Foy

I. GENERAL

* 1. Albert, Bernard W. TRAVEL: ANOTHER ASPECT OF REHABILITATION. Rehabilitation Record, v. 13, May–Jun 1972, p. 39–40.

Moss Rehabilitation Hospital, Philadelphia, has prepared and disseminated a folder on travel information for handicapped.

* 2. Bean, William. TRANSPORTATION OVERVIEW. Rehabilitation Record, v. 13, Jul–Aug 1972, p. 1–6.

Discussion of means of mobility for both mini-trips and point-to-point travel-from wheelchairs to automobiles and various modes of public transportation. Legislative efforts attest to recognition of extent and impact of problems.

* 3. Brattgard, S. O. TRANSPORTATION SERVICE AND COORDINATION IN PROBLEMS OF THE HANDICAPPED. Lakartidningen, v. 67, Nov 11, 1970, p. 5326-7. (Swedish)

4. Carter, J. W. SHIPBOARD MEDICINE ON PACKAGE CRUISES. British Medical Journal, v. 1, Feb 26, 1972, p. 553–6.

Describes intensified difficulties for both patients and doctors in properly treating shipboard illnesses; suggests package cruises often not suitable for elderly, handicapped and mentally unfit.

5. HANDICAPPED MAN PROVIDES TRANSPORTATION SERVICE FOR OTHER SIMILARLY DISABLED PERSONS. Traffic Safety, v. 71 no. 2, Feb 1971, p. 29.

Handicabs of Milwaukee with handicapped owner-manager provides transportation for handicapped school children and adults.

6. Highway Research Board. TRANSIT FOR THE POOR, THE AGED AND THE DISADVANTAGED. *Its* Highway Research Record No. 403, 1972, 53 p. (Main TE 5.3.H5A31 No. 403).

Eight reports examine transportation constraints that inhibit mobility; recommend planning programs at various governmental levels.

7. IMPROVING TRAVEL FOR THE HANDICAPPED. (By) Joel Sleed. The Washington Post, Nov 3, 1974, Section E. p. 14:1.

Special help, special diets are available if transportation companies are advised in advance.

* 8. Jones, Phillip R. TRANSPORTATION SERVICES FOR THE RETARDED. In, Scheerenberger, R.C. *Mental retardation, selected conference papers.* Springfield, Ill., State Department of Mental Health, Division of Mental Retardation Services, 1969, p. 161–6.

Experience in providing transportation for handicapped children in Champaign community schools provides basis for examining methods, problems and costs of such transport.

9. Lamminen, Toivo. TRANSPORTATION FOR THE HANDICAPPED. New Brunswick, N.J., Rutgers University, Sep 1969, 103 p. (Main HE 199.9.H2L27)

Report by the Center for Transportation Studies, Eagleton Institute of Politics of the State University of New Jersey.

* 10. Lauder, R. THE GOAL IS MOBILITY. Rehabilitation Record, v. 10, Sep–Oct 1969, p. 8–15.

Excerpts from paper treating physical factors in the environment that prevent disabled people from making maximum use of their potential for normal living. Suggestions for remedial action applied to housing, streets, buildings and various modes of transportation. (See also #24)

11. Mandella, Joseph L. and Harry A. Schweikert, Jr. MOBILITY FOR PHYSICALLY IMPAIRED PERSONS. Defense Transportation Journal, v. 28 no. 4, Jul–Aug 1972, p. 63–7.

Article examines all modes of transport, pointing up shortcomings with respect to the unsteady and the wheelchairbound.

12. Manus, Gerald and Menahem Less. FEASIBILITY STUDY ON TRANSPORTATION FOR THE HANDICAPPED. (Human Resources Study No. 16). Albertson, N.Y., Human Resources Center, 1972, 127 l. (Main TEA 6261.D5M36)

Explores programs to enhance opportunity for disabled persons to become contributors to society with help of personal and public transportation.

13. Ringe, Jeanne Weber. TRANSPORTATION FOR THE ELDERLY OR PHYSICALLY HANDICAPPED. Springfield, Va., National Technical Information Service, 1974, 25 l. (COM-74-10887/9GA) (Z 6663.A3R57)

    Bibliography with abstracts.

14. Schweikert, Harry A., Jr. MOBILITY NEEDS FOR PHYSICALLY IMPAIRED PERSONS. Washington, D.C., Paralyzed Veterans of America, Inc., Nov 1969, 36 p. (Main HE 199.9.H2S3)

    Identifies problems and needs in all modes of transport, with special attention to drivers and their disabilities, records, legal rights, licensing and insuring, training and education.

15. SIX MONTH STUDY IS BEGUN IN HUNTINGTON, L.I. TO DETERMINE TRANSPORTATION NEEDS OF HUNTINGTON RESIDENTS AND EVOLVE REMEDIAL PLAN. . .TO INCLUDE SENIOR CITIZENS, HANDICAPPED PERSONS, ETC. New York Times, May 20, 1973, p. 121:1.

16. TRAVEL FOR HANDICAPPED; ACTIONS BY AGENCIES, PAN AM, FAA, MOTELS; LIST OF AGENCIES SPONSORING TOURS. New York Times, Aug 24, 1973, p. 35:1.

17. Upper Great Lakes University Consortium for Transportation Research. BACKGROUND-RESOURCE PAPER. COUNCIL ON TRANSPORTATION NEEDS OF THE AGED AND HANDICAPPED (Prepared by) Arthur C. Vicory (and others), Houghton, Michigan, Michigan Technological University, 1973, 81 p. (Main HE 209.U778)

    Provides resource material for development of transportation proposals for tri-state region. Evaluates federal and state legislation and certain special projects.

* 18. Voorhees, Alan M. and Assoc., Inc. A TRANSPORTATION PROGRAM TO DEMONSTRATE SERVICE TO THE ELDERLY AND HANDICAPPED. Prepared for the City of Cranston, Rhode Island, Apr 1972, 75 p.

    Description of demonstration project to test ability of one community to provide transport to those deprived because of physical condition or income level. Recommendations for program detailing organization, equipment, operations and public relations.

* 19. Weingold, Joseph T. UNBINDING THE HOMEBOUND THROUGH MOBILITY. Rehabilitation Record, v. 13, Jul–Aug 1972, p. 11–13.

    Concept of "homebound" in today's advanced society is outdated. Concerted effort toward legislation and funding can provide mobility which helps bring individuals up to their maximum capacity.

II. GOVERNMENT ACTIVITIES

20. ABT Associates, Inc. TRAVEL BARRIERS–TRANSPORTATION NEEDS OF THE HANDICAPPED. Prepared for U.S. Department of Transportation, Office of Economics and Systems Analysis. Cambridge, Mass., Aug 1969, 311 p. (PB 187 327) (HE 203.A28)

    Study to determine extent to which public transport is inaccessible to physically handicapped, formulate requirements, propose alternative responses and assess impact of solutions.

21. FAA STUDYING HANDICAPPED SAFETY RULES. Aviation Week and Space Technology, v. 99 no. 16, Oct 15, 1973, p. 28. (See also section on Air Travel)

    Hearings being held to aid in developing uniform standards by which to accommodate the physically handicapped on board aircraft without compromising their safety and the safety of others.

22. H. R. APPROVES BIAGGI AMENDMENT TO FEDERAL URBAN MASS TRANSIT BILL REQUIRING TRANSIT SYSTEMS TO USE SPECIAL DESIGN FEATURES FOR HANDICAPPED. New York Times, Sep 30, 1970, p. 85;6.

23. Interdisciplinary Workshop on Transportation and Aging, Washington, D.C., 1970. TRANSPORTATION AND AGING, SELECTED ISSUES. Based on proceedings of the Interdisciplinary Workshop on Transportation and Aging,

Washington, D.C., May 24–26, 1970. Edited by Edmund J. Cantilli and June L. Shmelzer. Washington, D.C., U.S. Government Printing Office, 1971, 208 p. (DHEW pubn. no. (SRS) 72-20232) (GPO HE 17.302:T68–S/N 1762-0042) (Main HE 199.9.A4C65 1970a)

Joint participation by Polytechnic Institute of Brooklyn, Departments of HEW, HUD and DOT in conference workshop was first of its kind to bring together social scientists, gerontologists and transportation specialists to study mobility problems of aging and to develop design and operating guidelines to meet their needs.

* 24. Lauder, Ruth. THE GOAL IS: MOBILITY! ENVIRONMENTAL AND TRANSPORTATION BARRIERS ENCOUNTERED BY THE DISABLED. Prepared for the National Citizens Conference on Rehabilitation of the Disabled and Disadvantaged. U.S. Department of Health, Education and Welfare, Social and Rehabilitation Service. Washington, D.C., U.S. Government Printing Office, 1970, iv, 72 p. (GPO HE 1720:M71)

Publication is summarized in article appearing as #10.

25. Mark Battle Associates, Inc. TRANSPORTATION FOR THE ELDERLY AND THE HANDICAPPED. Prepared for National Urban League under Grant Nr. DOT-UT-533, U.S. Department of Transportation, Urban Mass Transportation Administration, Washington, D.C., Jul 1973, 189 p. (PB 225 285/6AS) (Main HE 4451.M32)

Four city sampling of responsiveness of transit systems to needs, with recommendations for service and system improvements.

26. National Capital Region Transportation Planning Board. TRANSPORTATION NEEDS OF SPECIAL URBAN GROUPS *Its*, Information Report No. 17. Washington, D.C., 1969, 11 p. (Main TEA 5537.N28 No. 17)

Identifies needs of "special urban groups" including handicapped with potential for evaluation of deficiencies in transportation services for these special segments of the population in the Washington, D.C. area.

27. P.L. 91-205. H.R. 14464, ACT TO AMEND ACT OF AUGUST 12, 1968 TO INSURE THAT CERTAIN FACILITIES CONSTRUCTED UNDER AUTHORITY OF FEDERAL LAW ARE DESIGNED AND CONSTRUCTED TO BE ACCESSIBLE TO THE PHYSICALLY HANDICAPPED. Approved Mar 5, 1970, 1 p. (Superintendent of Documents Public Laws, 91st Congress. 205)

28. P.L. 92-515. H.R. 11032, ACT TO ENABLE BLIND AND OTHERWISE PHYSICALLY DISABLED TO PARTICIPATE FULLY IN SOCIAL AND ECONOMIC LIFE OF DISTRICT OF COLUMBIA. Approved Oct 21, 1972, 3 p. (Superintendent of Documents Public Laws, 92nd Congress. 515)

29. UMTA PROGRAMS ASSIST PUBLIC TRANSPORTATION FOR THE ELDERLY AND THE HANDICAPPED. Highway and Urban Mass Transportation, Summer 1972, p. 32–3.

Section 16 of the Urban Mass Transportation Act of 1964 states that 1½% of total funding of UMTA programs may be set aside to assist state and local public bodies and agencies in providing mass transportation facilities and services for elderly and handicapped passengers. Article mentions BART and other UMTA-aided projects.

30. U.S. Congress. House. A BILL TO PROVIDE A DEDUCTION FOR INCOME TAX PURPOSES IN THE CASE OF DISABLED INDIVIDUAL FOR EXPENSES FOR TRANSPORTATION TO AND FROM WORK, AND TO PROVIDE AN ADDITIONAL EXEMPTION FOR A TAXPAYER OR SPOUSE WHO IS DISABLED. H.R. 196. 91st Congress, 1st sess. Jan 3, 1969, 6 p.

31. U.S. Congress. House. Committee on Public Works. ACCESSIBILITY TO PHYSICALLY HANDICAPPED OF CERTAIN PUBLIC FACILITIES. Report No. 91-750 to accompany H.R. 14464. 91st Congress, 1st sess. Dec 12, 1969, 3 p.

32. U.S. Congress. House. Committee on Public Works. Subcommittee on Public Buildings and Grounds. DESIGN AND CONSTRUCTION OF FEDERAL FA-

CILITIES TO BE ACCESSIBLE TO THE PHYSICALLY HANDICAPPED: HEARINGS, Dec. 9, 1969, on H.R. 14464. 91st Congress, 1st sess. 1970, iii–55 p. (Com. Pub. No. 91-23)

33. U.S. Congress. House. Committee on Public Works. Subcommittee on Public Buildings and Grounds. TO CONSIDER ACCOMMODATIONS FOR HANDICAPPED ON METRO SYSTEM (DISTRICT OF COLUMBIA): HEARINGS, Jun 29, 1972. 92d Congress, 2d sess. iii–73 p. (Com. Pub. No. 92-43)

34. U.S. Congress. Senate. A BILL TO PROVIDE A DEDUCTION FOR INCOME TAX PURPOSES IN THE CASE OF A DISABLED INDIVIDUAL FOR EXPENSES FOR TRANSPORTATION TO AND FROM WORK; AND TO PROVIDE AN ADDITIONAL EXEMPTION FOR INCOME TAX PURPOSES FOR A TAXPAYER OR SPOUSE WHO IS DISABLED. S. 1069. 91st Congress, 1st sess. Feb 18, 1969, 6 p.

35. U.S. Congress. Senate. Committee on Public Works. ACCESSIBILITY TO PHYSICALLY HANDICAPPED OF CERTAIN PUBLIC FACILITIES. Report No. 91-658 to accompany H.R. 14464. 91st Congress, 2d sess. Feb 6, 1970, 3 p.

36. U.S. Congress. Senate. Special Committee on Aging. A BARRIER-FREE ENVIRONMENT FOR THE ELDERLY AND THE HANDICAPPED: HEARINGS, Pts. 1–3, Oct 18–20, 1971. 92d Congress, 1st sess. Washington, D.C., U.S. Government Printing Office, 1972, 3 pts., 207 p. (GPO Y4.Ag4:En8/pt. (nos.))

37. U.S. Congress. Senate. Special Committee on Aging. OLDER AMERICANS AND TRANPORTATION: A CRISIS IN MOBILITY. Report No. 91-1520, Dec 1970. 91st Congress, 2d sess. Washington, D.C., U.S. Government Printing Office, 1970, viii–113 p.

38. U.S. Congress. Senate. Special Committee on Aging. TRANSPORTATION AND THE ELDERLY: PROBLEMS AND PROGRESS: HEARINGS, Pts. 1–4, Feb 25–28 and Apr 9, 1974. 93d Congress, 2d sess. Washington, D.C., U.S. Government Printing Office, 1974, 4 pts., 349 p.

* 39. U.S. Department of Health, Education and Welfare. Social and Rehabilitation Service. PHYSICAL IMPAIRMENTS AND THE LICENSE TO DRIVE. Washington, D.C., 1971, 4 p.

40. U.S. Department of Transportation. REPORT TO THE CONGRESS OF THE U.S. ON URBAN TRANSPORTATION POLICIES AND ACTIVITIES. Prepared jointly with U.S. Department of Housing and Urban Development. 1974, 40 p. (Main TEA 5000.U7A5 (yr))

At publication date, this is latest in series of annual reports (since 1972) documenting cooperative efforts on legislative proposals, policies and activities to assure that urban systems serve transportation needs of all.

* 41. U.S. Department of Transportation. National Highway Traffic Safety Administration. DRIVER EDUCATION FOR THE HANDICAPPED. Prepared under contract #SEE 35-009-71 by Southern Illinois University Safety Center, Carbondale, Ill., 1971, 2 v.

v. 1 Resource curriculum–driver education teacher preparation
v. 2 Resource guide

(Available from: State of Illinois, Office of Superintendent of Public Instruction, Driver Education Section, Springfield, Ill.)

42. U.S. Department of Transportation. Office of the Secretary. TRAVEL BARRIERS. Washington, D.C., May 1970, 46 p. (HE 203.U76)

Summarizes findings of research program sponsored by Office of Secretary of Transportation as result of its concern for accessibility of public transportation to all Americans. For fuller discussion and for planning purposes, see report itself at #20.

43. U.S. Department of Transportation. Transportation Systems Center and Urban Mass Transportation Administration. THE HANDICAPPED AND ELDERLY MARKET FOR URBAN MASS TRANSIT. EXECUTIVE SUMMARY. Washington, D.C., Jul 1973, 26 p. (PB 222 828/6 (Main HE 4451.U794)

Brief description of status, existing services, transit needs and demands of elderly and handicapped. Innovative systems such as Dial-a-Ride, transit stamps, etc. are discussed. First of two studies, second of which, with detailed findings and census data, appears below.

44. U.S. Department of Transportation. Transportation Systems Center and Urban Mass Transportation Administration. THE HANDICAPPED AND ELDERLY MARKET FOR URBAN MASS TRANSIT. Washington, D.C., Oct 1973, 178 p. (PB 224 821/9GA) (Main HE 4451.U7941)

    Information on transit characteristics of elderly and handicapped population: size and spatial distribution, current availability of transportation compared to spatial distribution; actual use; potential use dependent on implementation of changes in service.

45. U.S. Department of Transportation. Urban Mass Transportation Administration. THE ADDITIONAL COST OF PROVIDING MOBILITY FOR THE ELDERLY AND HANDICAPPED ON THE WASHINGTON METROPOLITAN RAIL RAPID TRANSIT SYSTEM. Washington, D.C., May 1973, 48 p. (PB 223 108/2) (Main HE 4491.W3U7)

    Estimates cost of adding elevators and associated equipment to meet special needs of handicapped and elderly users.

46. U.S. Department of Transportation. Urban Mass Transportation Administration. PUBLIC TRANSPORTATION FOR THE ELDERLY AND THE HANDICAPPED. Washington, D.C., 1971, 5 p. (Main HE 4451.U792)

    List of accomplishments by UMTA to provide for public transit needs of elderly and handicapped as of Mar 1972; these include: research, development and demonstration; service provided and programmed; capital grants.

* 47. U.S. Department of Transportation. Urban Mass Transportation Administration. TRANSPORTATION FOR THE ELDERLY. Bibliography by Patricia Cass. n.d., processed, 6 p.

    63 citations, 1964–72, books, reports, articles. Not annotated.

* 48. U.S. Department of Transportation. Urban Mass Transportation Administration. TRANSPORTATION FOR THE HANDICAPPED. Bibliography by Patricia Cass. n.d., processed, 13 p.

    199 citations, 1959–72, books, reports, articles. Not annotated. Includes the disabled, physically handicapped, blind, and elderly.

* 49. U.S. National Park Service. NATIONAL PARK GUIDE FOR THE HANDICAPPED. Washington, D.C., U.S. Government Printing Office, 1971, 79 p. (GPO 129.9/2:H19, S/N 2405-00286)

* 50. U.S. President's Committee on Employment of the Handicapped. DESIGNING PUBLIC TRANSPORTATION FOR USE BY THE HANDICAPPED. (By) Edward H. Noakes. Reprinted from *Performance*, monthly publication of the Committee. Washington, D.C., U.S. Government Printing Office, 1969, 4 p. (PrEx1.10/3a:T687)

* 51. U.S. President's Committee on Employment of the Handicapped. A LIST OF GUIDEBOOKS FOR HANDICAPPED TRAVELERS. 3d ed. 1972.

52. U.S. President's Committee on Mental Retardation. TRANSPORTATION AND THE MENTALLY RETARDED. Washington, D.C., U.S. Government Printing Office, Jun 1972, iv–58 p. (DHEW Pub. (OS)72-40) (GPO Pr36.8:M52/T68) (Main HE 199.9.H2U67)

    Recommends ameliorative programs and facilities in two major problem areas: 1) development of independent travel, and 2) improvement of dependent travel.

* 53. U.S. President's Task Force on the Physically Handicapped. A NATIONAL EFFORT FOR THE PHYSICALLY HANDICAPPED: THE REPORT. Washington, D.C., U.S. Government Printing Office, Jul 1970, vi–34 p. (GPO Pr37.8:P56/R29)

54. White House Conference on Aging, 1971. TRANSPORTATION: BACKGROUND, (By) Joseph S. Revis; ISSUES, (By) the Technical Committee on Transportation with the collaboration of the author. Thomas C. Morrill, Chairman, Washington, D.C., U.S. Government Printing Office, Mar 1971, viii–51 p. (GPO Y3.W58/4:2T68/2; S/N 5247-0024) (Main HQ 1064.U5W56 No. 15)

Discusses needs, goals, present knowledge on problems of elderly. Sets forth issues relevant to improvement so as to focus discussion on development of recommendations toward adoption of national policies.

III. ACCESSIBILITY

55. ABT Associates, Inc. ACCESSIBILITY OF THE METROPOLITAN WASHINGTON, D.C. PUBLIC TRANSPORTATION SYSTEM TO THE HANDICAPPED AND ELDERLY. Final report. Cambridge, Mass., 1972, 150, (68) l. (PB 231 815/2GI) (Main HE 4491.W3A23)
Experiences of 250 handicapped and/or elderly citizens help provide guidelines for design and performance standards in new transit system.

* 56. Browning, A. HIGH SPEED PEDESTRIAN CONVEYORS. Proceedings of the Royal Society of Medicine, v. 65, Jul 1972, p. 614.
Disabled participate in tests to determine how particular disabilities affect performance on 10 mph conveyor.

57. Curry, James P. PROVIDING TRANSPORTATION FOR PERSONS WITH LIMITED MOBILITY IN SUBURBAN AREAS. IN Highway Research Board. Transit for the poor, the aged and the disadvantaged. *Its* Highway Research Record no. 403, 1972, p. 47–8. (Main TE 5.3.H5A31 No. 403)
For one suburban California county survey points to feasibility of a limited service, dial-a-bus system to complement high speed BART.

58. DESIGNING FOR THE DISABLED. Railway Gazette International (Great Britain), v. 127 no. 11, Nov 1971, p. 440–2.
British Railways makes design changes and modifications to existing facilities. Discusses other European rail transport plans as well as those of Washington Metro system.

* 59. Dwoskin, Stephen. THE DISABLED'S ENCOUNTER WITH THE ENVIRONMENT. Design and Environment, v. 1 no. 2, Summer 1970, p. 60–3.
How designers can make it easier for disabled to get around with only minor modifications to environmental details in cars, curbs, stairs, ramps, etc.

* 60. Evans, V.G. HOLIDAY PROBLEMS OF THE DISABLED. Community Health (Bristol), v. 3 no. 4, Jan–Feb 1972, p. 169–70.
Hints from a disabled person on air/land/sea holiday travel.

61. HANDICAPPED TO BE CONSIDERED IN BUILDING DESIGN (California). Engineering News-Record, v. 187, Nov 4, 1971, p. 16.
California legislation requires new building over 10,000 sq. ft. to provide ramps and other provisions of ANSI code.

* 62. Henning, D. N. CONSIDERATION OF THE PHYSICALLY DISABLED. Canadian Building Digest, CBD 135, Mar 1971, entire issue, 4 p.
Characteristics of disabled persons should be considered at design stages of buildings; even minor modifications can result in facilities suitable for both able and many of the disabled population.

* 63. Hogan, Jane. REST AREAS NOW DESIGNED FOR EASY USE BY HANDICAPPED. Highway Highlights (Kansas), v. 34 no. 10, Nov 1973, p. 15.
Rest areas with doors wide enough for wheelchairs; ramps and railings now included in Kansas state design.

* 64. Jacobs, Irene D. LEGISLATIVE ACTION. CURB ON CURBS. Journal of Rehabilitation, v. 38, Sep–Oct 1972, p. 19–21.
Legislative effort to outlaw architectural barriers on state and municipal levels.

65. K. DIRLAN LETTER ON AUG 24 ARTICLE ON TRANSPORTATION FOR THE HANDICAPPED NOTES RECENT IMPROVEMENTS MADE BY PENN CENTRAL NEW HAVEN DIVISION RE RAMPS. New York Times, Sep 13, 1973, p. 46:4.

* 66. LATEST FACILITIES FOR HANDICAPPED ALONG STATE HIGHWAYS. Minnesota Highways, v. 20 no. 2, Feb 1972, p. 7.

Special aids for handicapped travelers built into 24 roadside rest areas make them relatively barrier-free. List of locations included.

67. LETTER URGES MORE ESCALATORS TO HELP AGED OR INFIRM USE SUBWAYS. New York Times, Jan 11, 1969, p. 32:6.

68. National Swedish Institute for Building Research, Stockholm. ACCESSIBLE TOWNS. WORKABLE HOMES. PLANNING WITH CONSIDERATION FOR THE HANDICAPPED. 1972, 34 p. PB 212 775.

A handicap is a combination of physical disability and deficiencies of the environment. Planners must concentrate on providing both indoor and outdoor environments that are accessible to all groups of the population.

69. ORDER RAMPS AT CROSSINGS. Michigan Roads and Construction, v. 70 no. 34, Aug 23, 1973, p. 5.

Sidewalk ramps to aid physically handicapped persons will be incorporated into all new construction where state highways intersect with crosswalks.

70. PROBLEMS THAT HANDICAPPED PERSONS FACE WHEN THEY TRAVEL BY PUBLIC MEANS IN U.S. DISCUSSED... New York Times, Nov 28, 1971, Section V, p. 17:1.

* 71. REMOVING BARRIERS FROM THE PATHWAYS OF THE HANDICAPPED. Human Needs, v. 1 no. 8, Feb 1973, p. 28.

* 72. Sahaj, Lynn. MOBILITY FOR THE DISADVANTAGED. Transportation Topics for Consumers (U.S. Department of Transportation), v. 1 no. 4, Nov. 1973, p. 1, 4–5.

UMTA program focuses on needs of persons with special problems.

IV. AIR TRAVEL

73. AIR TRANSPORT ASSOCIATION ANNOUNCING PROGRAM TO FACILITATE FLIGHTS OF PASSENGERS' PETS LETS SEEING-EYE DOGS IN PASSENGER CABIN FREE OF CHARGE. New York Times, May 12, 1969, p. 93:4.

74. AIR TRAVEL BY THE HANDICAPPED. Editorial, The Washington Post, Jun 1, 1974, p. 10:1.

Urges FAA to find solutions, consistent with safety, to haphazard discrimination often suffered at airports by handicapped.

75. ARTICLE ON NEW POLICY OF U.S. AIRLINES EASING POLICIES GOVERNING TRANSPORT OF PARAPLEGIC OR OTHER HANDICAPPED PASSENGERS... New York Times, Apr 15, 1973, p. 58:2.

76. Belton, Robert O. HANDLING HANDICAPPED PASSENGERS. IN International Air Safety Seminar, 25th, Washington, D.C., Oct 16–18, 1972. Washington, D.C., Flight Safety Foundation, 1972, p. 87–90. (TL 720.5.A73 1972)

Recommended seating arrangement and emergency evacuation procedures for air travel by handicapped passengers.

77. CAB TO STANDARDIZE FARES FOR DISABLED. Aviation Week & Space Technology, v. 101 no. 7, Aug 19, 1974, p. 34.

78. FAA DRAFTS RULES TO AID HANDICAPPED. The Washington Post, May 23, 1974, Section C, p. 1:1.

79. FAA RULES WILL AID DISABLED. (By) Stephen Green. The Washington Post, Jul 4, 1974, Section B, p. 1:8.

Proposed-rule making to amend Federal Aviation Regulations Parts 121 and 135 to provide rules for safe carriage of persons who, because of physical condition, may require the assistance of another person during an emergency evacuation.

80. HANDICAPPED PERSONS OPPOSE PROPOSED AIRLINE RESTRICTIONS. (By) Keith Butler. The Washington Post, Jul 26, 1974, Section C, p. 1:1.

81. HANDICAPPED WOMAN[illegible] PILOT DENIED SEAT. (By) Stephen Green. The Washington Post, Jul 29, 1974, Section C, p. 1:8.

82. HELPING HAND FOR HANDICAPPED (TERMINAL PLANNING AT DALLAS/FT. WORTH REGIONAL AIRPORT).

Airport World, v. 5 no. 2, Feb 1972, p. 15.

83. Hogsett, Stanley G. AIRLINE TRANSPORTATION FOR THE HANDICAPPED AND DISABLED: A SURVEY OF POLICIES OF 22 DOMESTIC AIRLINES. Chicago, National Easter Seal Society for Crippled Children and Adults, 1971, 45 p.

    Document prepared as a guideline for anyone called upon to advise or plan air travel for disabled and handicapped. Information presented in easy-to-use tabular form and followed by basic recommendations for prospective traveler.

84. Mohler, Stanley R. and Joseph A. Sirkis. AIRPORT MEDICAL DESIGN GUIDE (WITH COMMENT ON CERTAIN OPERATIONAL MATTERS). Aerospace Medicine, v. 43 no. 8, Aug 1972, p. 903–11.

    Specific biologically supported design features are suggested for incorporation in air terminal design to accommodate physically handicapped, chronically ill, elderly, infirm and emotionally disturbed persons.

85. PAN AM WILL OFFER SPECIAL GROUP TOURS OF EUROPE AND HAWAII FOR PHYSICALLY DISABLED TO BEGIN EARLY 72. . . New York Times, Dec 12, 1971, Section X, p. 4:5.

86. PARAPLEGICS AIR RULE CLARIFIED. The Washington Post, May 24, 1974, Section C, p. 4:1.

87. Puglisi, Frank J. WHEELCHAIRS TAKE WING. FAA World, v. 4 no. 6, June 1974, p. 8–9.

    First organized pilot training program for paraplegics and amputees begun by FAA General Aviation District Office in Richmond, Va.

88. Schleichkorn, Jacob S. CARRIAGE OF THE PHYSICALLY HANDICAPPED ON DOMESTIC AND INTERNATIONAL AIRLINES: A REPORT ON THE POLICIES, RULES AND REGULATIONS AFFECTING TRAVEL OF THE HANDICAPPED. New York, United Cerebral Palsy Assoc., 1972, 44 p.

89. TWO AIRLINES DENY SEAT TO PARAPLEGIC. (By) Stephen Green. The Washington Post, May 22, 1974, Section B, p. 1:1.

90. Yanowitch, Robert E. and Joseph A. Sirkis. AIR TRAVEL AND THE HANDICAPPED. Aerospace Medicine, v. 45 no. 8, Aug 1974, p. 879–82.

    Problems of handicapped air travelers treated from both physiological and psychological viewpoints. Improvements in travel for the handicapped can only result from education of both carriers and travelers to needs of each other.

V. MASS TRANSIT

91. American Institute of Architects. Potomac Valley Chapter. BARRIER FREE RAPID TRANSIT; final report of the American Institute of Architects to U.S. Social and Rehabilitation Service Administration for the President's Committee on Employment of the Handicapped. Silver Spring, Md., 1969, 1 v. unpaged. (HE 4491.W3A74) Also IN Potomac Valley Architect, v. 3, no. 2, Sep–Oct 1969, entire issue.

92. BART SYSTEM WILL SERVE ALL OF THE HANDICAPPED. Rapid Transit (San Francisco Bay Area Rapid Transit District), v. 11 no. 4, Dec 1969, p. 3.

    Additional $10 million will provide special elevators, escalators, anti-slip materials, special parking, special service gates, ramps, rest rooms, etc., to assure complete accessibility.

93. Cole, Leon Monroe. MULTISERVICE TRANSPORT SYSTEMS FOR URBAN MOBILITY (presented at ASCE Transportation Engineering Meeting, Washington, D.C., Jul 21–5, 1969). Journal of the Urban Planning and Development Division (American Society of Civil Engineers), v. 97 no. UP-1, Apr 1971, p. 31–9.

    Explication of MUST (multiservice transportation) concept for flexible supplemental transportation service, supported jointly by HUD and DOT.

* 94. CONCESSIONARY FARES (ON LOCAL TRANSIT SYSTEMS FOR THE AGED AND DISABLED: GREAT BRITAIN). Labour Research, v. 60, 1971; Jul, p. 119–21; Aug, p. 138–9; Nov, p. 193–5.

95. IT'S PEOPLE THAT MATTER. Passenger Transport, v. 30 no. 25, Jun 23, 1972, p. 1, 6.
Public mass transit must meet needs of all, including handicapped and elderly, is theme of three-day conference sponsored by American University and U.S. DOT's Urban Mass Transportation Administration.

96. MASS TRANSIT PLANS INCLUDE HANDICAPPED. American City, v. 85 no. 4, Apr 1970, p. 54.
Funicular lift which glides on 30° incline and fits standard escalator slot to be used in Washington, D.C. rapid transit system.

97. Mouchahoir, George E. MANAGEMENT OF A TRANSPORTATION SYSTEM FOR THE DISADVANTAGED. Traffic Quarterly, v. 28 no. 2, Apr 1974, p. 291–306.
Atlanta study reveals that social service centers suffer from lack of management, operational and planning experience in providing transportation service to clients rather than lack of funds. Recommends centralized system.

98. NY STATE DEMOCRATIC SENATE CANDIDATE OTTINGER URGES PROVISIONS FOR HANDICAPPED AND ELDERLY USERS BE BUILT INTO NEW SUBWAY CONSTRUCTION. New York Times, Oct 14, 1970, p. 35:3.

99. Northwestern University. Transportation Center Library. URBAN TRANSPORTATION PLANNING REFERENCES. A CHECKLIST FOR LIBRARY COLLECTIONS. Rev. ed. Evanston, Ill., Apr 1972, 44 p. (PB 214 648/8) (Main Z 7164.T8T84 1972)
Comprehensive bibliography updating previous edition of 1970.

100. 26.5 MILLION HANDICAPPED TO NEED MASS TRANSIT AID. Traffic World, v. 155 no. 8, Aug 27, 1973, p. 22.
Study recommends federal assistance on mass transit projects be contingent upon planning for handicapped and elderly; proposes two demonstration projects providing transit stamps or taxi coupons where needed.

*101. Willson, Harold L. BARRIER-FREE RAPID TRANSIT FOR SAN FRANCISCO BAY AREA. Rehabilitation Record, v. 13, Jul–Aug 1972, p. 7–10.
Design features which make the trains accessible to, and safe for, wheelchair passengers and other handicapped or elderly riders.

*102. Willson, Harold L. SPECIFIC CONSIDERATIONS GIVEN TO THE ELDERLY AND HANDICAPPED ON THE SAN FRANCISCO BAY AREA RAPID TRANSIT SYSTEM. Oakland, Calif., Kaiser Foundation, 7 p.

VI. AUTOMOBILES

A. Drivers

*103. Aaron, J. DRIVER EDUCATION FOR THE HANDICAPPED. Carbondale, Ill., Southern Illinois University Safety Center, 1971.

104. Bardach, J.L. DRIVER EDUCATION FOR THE PHYSICALLY DISABLED: PSYCHOLOGICAL FACTORS AFFECTING DRIVING BEHAVIOR IN THE DISABLED. Medical Clinics of North America, v. 53 no. 3, May 1969, p. 692–6.
Effects of emotions, body image, intellect and perception; task of rehabilitation is to teach patients ways of recognizing and circumventing disabilities.

*105. Bardach, J.L. PSYCHOLOGICAL FACTORS IN THE HANDICAPPED DRIVER. Archives of Physical Medicine and Rehabilitation, v. 52 no. 7, Jul 1971, p. 328–32.
Factors contributing to difficulty in training the handicapped driver are severity of motor disability, emotional problems, body-image difficulties, perceptual motor impairments and cognitive deficits. These further interact with each other in ways not yet understood.

*106. BEST IF NOT THE MOST ABLE (AUTOMOBILE DRIVERS). Labour Gazette, v. 70, Apr 1970, p. 292–4.

*107. California Department of Motor Vehicles. Research and Statistics Section. PHYSICALLY HANDICAPPED DRIVERS: A COMPARATIVE STUDY OF

DRIVER RECORDS. (By) Dell R. Dreyer. *Its* Research Report 42. Sacramento, Calif., DMV, May 1973, 13 p. (PB 222 967/2)

A study of 694 physically handicapped California drivers showed they had a similar involvement in total accidents, a lesser number of convictions than the average driver, and some indication that male handicapped drivers may be involved in more fatal and injury accidents than the average male driver.

*108. Finesilver, Sherman C. A STUDY ON DRIVING RECORDS, LICENSING REQUIREMENTS AND INSURABILITY OF PHYSICALLY IMPAIRED DRIVERS. Denver, Colo., University of Denver, College of Law, Oct 1, 1970, 60 p. (PB 217 090/0)

Study revealed that, with respect to overall accident involvement, the physically impaired driver was underrepresented in accident statistics, averaged lowest in injury-producing accidents and is a superior insurance risk.

*109. HANDICAPPED DRIVERS RANK HIGH IN NATIONAL SAFETY STUDY. Best's Review, v. 70, Mar 1970, p. 40.

*110. Hartmann, H. THE MEDICAL EVALUATION OF PHYSICALLY HANDICAPPED AUTOMOBILE DRIVERS ON THE BASIS OF THE LEGAL REGULATIONS. Praxis, v. 60, 27 Apr 1971, p. 529–31. (German)

*111. Hofkosh, J.M. DRIVER EDUCATION ASSESSMENT AND TRAINING PROGRAMS. Progress in Physical Therapy, v. 1, 1970, p. 75–86.

112. Hofkosh, J.M. and others. DRIVER EDUCATION FOR THE PHYSICALLY DISABLED; EVALUATION, SELECTION AND TRAINING METHODS. Medical Clinics of North America, v. 53 no. 3, May 1969, p. 685–89.

Driver education is seen as a continuum in total activities of daily living process. Patient must learn and practice techniques relating to proper use of motor vehicle as he does techniques for dressing, walking, self-care. Ultimate goal is increased mobility, new independence and return where possible to job and community.

*113. Lehneis, H.R. THE SAFETY ACHIEVEMENTS OF THE DISABLED DRIVER. Biomedical Engineering, v. 8, Oct 1973, p. 438–9.

Independent driving may halp restore patients' body image and thus help in resocialization process. Motivation is probably the strongest, but certainly not the only force in safety achievement of the disabled driver.

*114. Long, Charles, II. THE HANDICAPPED DRIVER–A NATIONAL SYMPOSIUM. Journal of Rehabilitation, v. 40, Mar–Apr 1974, p. 34–9.

Theme of symposium was "Handicapped drivers can drive safely. . .and do." This was reflected in reports on driver training, testing with simulator and on road, licensing, driver performance, insurance. Firm recommendation made for future meetings.

*115. Mach, J. DRIVING ABILITY OF THE HANDICAPPED. Beitraege zur Orthopaedie und Traumatologie, v. 18, Mar 1971, p. 167–71. (German)

*116. Mathias, James D. DRIVER TRAINING. Rehabilitation Record, v. 13, Jul–Aug 1972, p. 18–9.

Pennsylvania's Bureau of Vocational Rehabilitation offers driver course averaging 10 hours behind the wheel, 30 hours of classroom work, in severe cases up to 35 hours of actual driving instruction.

117. Millichamp, D. WHO CARES ABOUT THE DISABLED DRIVER? Engineering, v. 210, Aug 21–28, 1970, p. 192.

Points up design defects in three-wheeled vehicles made available to disabled in Britain.

*118. Myers, Lowell J. HOW TO GET AUTOMOBILE INSURANCE FOR THE DEAF. Insurance, v. 70, Aug 23, 1969, p. 15–18.

A Chicago lawyer who has made legal interests of the deaf his special interest believes dishonest insurance brokers are taking advantage of deaf people who are in reality safe drivers.

119. NEW YORK STATE EMERGENCY FUEL OFFICE SAYS HANDICAPPED PEOPLE WHO USE CARS FOR TRANSPORTATION WILL BE EXEMPT FROM ODD-EVEN GASOLINE SALES. New York Times, Mar 7, 1974, p. 28:7.

120. Rhoads, Milton D. and Paul W. Matthews. A NEW DIMENSION TO MOBILITY; NEW RESOURCES AND NEW TECHNIQUES IN TEACHING THE HANDICAPPED TO DRIVE ARE PROVING OUT IN OKLAHOMA. Highway User, Nov 1971, p. 21–3.

121. Richter, Ronald L. and William A. Hyman. RESEARCH NOTE: DRIVER'S BRAKE REACTION TIMES WITH ADAPTIVE CONTROLS. Human Factors, v. 16 no. 1, Feb 1974, p. 87–8.
Results of study show significantly shorter response time for hand-operated units than for normal foot controls.

*122. Schweikert, Harry A., Jr. DISABLED ARE DEPENDENT ON THE AUTO. Paraplegia News, v. 23 no. 259, Mar 1970, p. 3, 16, 22.

*123. Siegrist, H. EVALUATION OF THE FITNESS OF THE PHYSICALLY HANDICAPPED FOR DRIVING. Praxis, v. 60, Apr 27, 1971, p. 537–8.

*124. Stock, Michael and others. LICENSING THE DRIVER WITH MUSCULOSKELETAL DIFFICULTY. Journal of Bone and Joint Surgery, v. 52-A no. 2, Mar 1970, p. 343–6.
Summary of U.S. Public Health Service guidelines for licensing medically impaired motor vehicle operators.

125. A THOUGHT FOR THE DISABLED DRIVER. Lancet, v. 2, Sep 6, 1969, p. 528–9.
Disabled are being provided, in British Government assistance programs, vehicles which rarely meet their needs.

*126. Tynan, J. SOME OF OUR BEST DRIVERS. Hartford, Conn., Department of Motor Vehicles, 1970, 8 p.
Updating of special report based on question of whether physically handicapped are good or bad drivers.

*127. Ysander, L. ILL AND HANDICAPPED AUTOMOBILE DRIVERS. Lakartidningen, Apr 14, 1971, p. 1891–7. (Swedish)

*128. Ysander, L. SICK AND HANDICAPPED DRIVERS: A STUDY ON THE RISKS OF SUDDEN ILLNESS AT THE WHEEL AND ON THE FREQUENCY OF ROAD ACCIDENTS AND TRAFFIC OFFENSES IN CHRONICALLY SICK, DISABLED AND ELDERLY DRIVERS. Acta Chirurgica Scandinavica. Supplement, v. 409, 1970, p. 1.

B. Parking

129. DuSautoy, H.R. CAR PARKING FOR THE DISABLED. Traffic Engineering and Control, v. 14 no. 7, Nov 1972, p. 346–7.
Britain's legislative and practical approaches to providing car parking facilities to allow drivers to maintain their employment and as normal a way of life as possible.

130. LETTER CONTENDS THAT SOME PROVISIONS MUST BE MADE FOR HANDICAPPED PERSONS IN NYC'S DRIVE AGAINST PARKING IN DOWNTOWN MANHATTAN. . .New York Times, Jul 3, 1973, p. 22:4.

131. NYC COUNCIL MAY 10 UNANIMOUSLY APPROVES BILL GRANTING WIDESPREAD PARKING PRIVILEGES TO 2000 HANDICAPPED DRIVERS. . .New York Times, May 11, 1972, p. 32:1.

132. NYC MAYOR LINDSAY. . .SAYS NYC HAS ISSUED 3200 PERMITS TO HANDICAPPED PERSONS, MANY OF WHOM PARK IN MIDTOWN. . .New York Times, Aug 2, 1973, p. 39:8.

133. NYC TRANSPORTATION ADMINISTRATOR SIDAMON-ERISTOFF ON JUNE 24 SAYS SPECIAL PARKING PRIVILEGES IN MIDTOWN FOR HANDICAPPED WILL BE CURTAILED UNDER PLANS BEING FORMULATED BY CITY'S TRAFFIC DEPT. . .New York Times, Jun 25, 1973, p. 14:3.

VII. SPECIAL EQUIPMENT

A. Vehicles

134. ARTICLE DESCRIBES BATTERY-OPERATED CHAIRMOBILE FOR HANDICAPPED DESIGNED BY EARL OF SNOWDON, FORMER A. ARMSTRONG-JONES. New York Times, Mar 21, 1972, p. 46:1.

135. Brooks, B.M. and others. AN INVESTIGATION OF FACTORS AFFECTING THE USE OF BUSES BY BOTH EL-

DERLY AND AMBULANT DISABLED PERSONS. (Preston?), British Leyland Motor Corp., 1974, vi–109 p. (Main HE 199.9.H2B86)

*136. Cunningham, Don M. SPECIAL VEHICLES FOR THE SEVERELY DISABLED, ADJUSTABLE-HEIGHT WHEELCHAIR AND AUTO LIFT FOR THE QUADRIPLEGIC DRIVER. Berkeley, Cal., University of California, Department of Mechanical Engineering, Mar 1971, 39 p. (PB 215 346/8)

It is in principle possible to design and construct adjustable-height wheelchair which can substitute for front seat of standard auto and lift to place chair in driver or occupant position.

*137. Dunn, John H. HANDICABS: THE STORY OF A BOLD TRANSPORTATION ADVENTURE FOR THE HANDICAPPED IN MILWAUKEE, WISCONSIN. Rehabilitation Record, v. 13, Jul–Aug 1972, p. 14–7. (See also #5)

Muscular dystrophy victim operates firm responsible for transporting 1400 handicapped children daily to special classes, also individuals who can't use other transportation facilities.

*148. NOW HANDICAPPED PERSONS CAN DRIVE A CAR RIGHT FROM THEIR OWN WHEELCHAIR. Popular Mechanics, v. 139 no. 3, Mar 1973, p. 101.

*149. Smith, Anita P. and others. WHEELCHAIRMANSHIP PROJECT. Final Report. Minneapolis, Minn., American Rehabilitation Foundation, Apr 30, 1971, 170 p. (PB 215 146/2)

Project developed course of training for employees in transportation and other fields to help them better contribute to mobility of the physically handicapped.

150. SPECIAL BUSES FOR ELDERLY AND HANDICAPPED. Metropolitan, v. 69 no. 1, Jan–Feb 1973, p. 22.

Demonstration program will use six specially designed buses with hydraulic lift, wide doors, handrails, etc.

151. SPECIAL CABS ENABLE HANDICAPPED TO WORK; HANDICABS OF MILWAUKEE. Today's Health, v. 48, Dec 1970, p. 16.

Description of project at #137.

152. Stewart, Carl F. and Herbert G. Reinl. STUDENT WHEELCHAIR TRANSPORTATION LOADING AND SECUREMENT. Sacramento, Calif., State of California Bus and Transportation Agency (CALTRANS), Aug 1974, 75 p. (Main HE 199.9.H2S84)

Presents results of study on developing specifications for "wheelchair" school buses, engineering evaluation of the equipment and discussion of possible problems related thereto.

*153. Swedish Institute for the Handicapped. REPORT ON RESEARCH AND DEVELOPMENT OF CARS FOR SEVERELY DISABLED. Bromma, Sweden, Handikappinstitutet, 1971.

154. THREE-WHEELER CONVERSION HELPS THE DISABLED. Engineering, v. 208 no. 5392, Aug 29, 1969, p. 207.

Several types of three-wheeled British vehicles are being converted for operation by either normal or handicapped drivers.

155. TRANSPORTATION FOR THE HANDICAPPED. Highway User, Nov 1969, p. 9.

"Medicar" allows up to three handicapped persons to ride seated in their wheelchairs, provides ramp access.

*156. TRANSPORTATION PLUS FOR HANDICAPPED (HANDICABS, MILWAUKEE). School Bus Fleet, Aug–Sep 1972, p. 20–4. (See also #137)

157. WITH DOT'S APPROVAL, BUSES WILL HAVE LIFTS FOR HANDICAPPED. American City, v. 88 no. 6, Jun 1973, p. 28.

BART has requested DOT grant to finance 2/3 of proposed operation costs of 32 new buses with lifts for wheelchair use.

B. Assistive

*158. American Automobile Association. VEHICLE CONTROLS FOR DISABLED PERSONS. Washington, D.C., AAA, Traffic Engineering and Safety Department, Jun 1969.

*159. Deyoe, F.S. and V.W. Andersen. WHEELCHAIR-CAR TRANSFERS FOR QUADRIPLEGICS. American Corrective Therapy Journal, v. 24, Sep–Oct 1970, p. 130–2.

*160. Freeman, C.C. EVALUATION OF ADAPTIVE AUTOMOTIVE DRIVING AIDS FOR THE DISABLED. Bulletin of the New York Academy of Medicine, v. 50, Apr 1974, p. 536–44.

*161. Henshaw, J.T. A CAR TO CHAIR LIFT: DESIGN OF A PROTOTYPE. Biomedical Engineering, v. 5, Aug 1970, p. 398–400.

With little maintenance and safe operation, equipment makes possible a dignified and quick transfer from car to chair and vice versa so that disabled persons are once again independent and free to travel.

*162. Jolicoeur, Roger. WHEELCHAIRMANSHIP. Rehabilitation Record, v. 12, Jan–Feb 1971, p. 33–5. (See also #149)

Program by American Rehabilitation Foundation to educate people in key public service industries, including transportation, to better serve persons with physical disabilities.

163. Lehneis, H.R. and others. DRIVER EDUCATION FOR THE PHYSICALLY DISABLED: DRIVING AIDS: DESIGN AND DEVELOPMENT. Medical Clinics of North America, v. 53, May 1969, p. 689–92.

Illustrations of number of assistive devices developed for individual patients, found useful for many.

164. LIFT FOR HANDICAPPED. Traffic Engineering, v. 40 no. 7, Apr 1970, p. 19.

Proposed design for funicular lift to serve handicapped in Washington, D.C., rapid transit system.

*165. Stupp, George Bernard, Jr. MINIMAX DESIGN OF A DISCRETE RATE HIGHWAY VEHICLE STEERING CONTROL. Master's thesis. Urbana, Ill., University of Illinois. Coordinated Sciences Laboratory, Aug 1971, 68 p. (AD 730 119)

Problem of road vehicle steering for the severely disabled is discussed and a discrete rate steering control proposed.

*166. TRAVEL FOR THE SEVERELY DISABLED. 2d ed. London, Joint Committee on Mobility for the Disabled, May 1970, 11 p.

How to get in and out of a vehicle; list of ancillary equipment; car and van conversion possibilities.

VIII. TRANSPORTATION AND THE BLIND

167. American Foundation for the Blind. TRAVEL CONCESSIONS FOR BLIND PERSONS. Rev. New York, the foundation, n.d., 12 p.

Discussion of program of reduced fares for rail and bus travel, eligibility and application instructions.

168. ARTICLE ON THE BLIND AS TOURISTS. New York Times, Apr 26, 1970, Section X, p. 3:1.

169. IN ROCHESTER (N.Y.) SPECIAL INSTRUCTORS TEACH BLIND TO RIDE. Passenger Transport, v. 30 no. 16, Apr 21, 1972, p. 3.

Blind learn to ride alone with use of guide sticks and special card systems, specially trained instructors and cooperation of the transit system.

170. Leonard, J.A. and R.C. Newman. THREE TYPES OF "MAPS" FOR BLIND TRAVEL. Ergonomics, v. 13, Mar 1970, p. 165–79.

171. A NEW WORLD AT THEIR FINGERTIPS. (By) J. Alvin Kugelmass. New York Times, Apr 26, 1970, Section XX, p. 3:1.

*172. Rhea, K. NOTES ON TRAVEL ADJUSTMENTS FOR THE BLIND. American Corrective Therapy Journal, v. 24 no. 1, Jan–Feb 1970, p. 25–9.

*173. Rhea, K. and others. TRAVEL ADJUSTMENT OF A BLIND NEUROPSYCHIATRIC PATIENT. American Corrective Therapy Journal, v. 23 no. 3, May–Jun 1969, p. 74–7.

IX. TRANSPORTATION AND THE ELDERLY

*174. Andryshak, Richard and John Crain. TRANSPORTATION AND OLDER PERSONS. Washington, D.C., U.S. Department of Transportation, Urban Mass Transportation Administration, Apr 1971. Processed.

*175. Ashford, Norman and Frank M. Holloway. THE EFFECT OF AGE ON URBAN TRAVEL BEHAVIOR. Tallahassee, Fla., Florida State University, Transportation Center, Jun 30, 1970, 207 p. (PB 196 843)

Study shows elderly can exhibit high demand for mobility but at other than

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peak hours and are therefore not well served by transportation facilities that provide maximum mobility to average resident at minimum cost.

*176. ______. TRANSPORTATION PATTERNS OF OLDER PEOPLE IN SIX URBAN CENTERS. Gerontologist, v. 12 no. 1, Spring 1972, p. 43–7.

Summarizes study at #175.

177. ______. VARIATION OF URBAN TRAVEL CHARACTERISTICS WITH AGE. Transportation Engineering Journal (American Society of Civil Engineers), v. 98, TE-3 no. 9124, Aug 1972, p. 715–32 (See also #175)

*178. Byerts, T., A.M. Guillemard and others. TRANSPORTATION. Gerontologist, v. 12 no. 2, Summer 1972, p. 11–16.

*179. Cameron, D.C. THE HAZARDS OF OCEAN CRUISES FOR THE ELDERLY AND INFIRM. Scottish Medical Journal, v. 17, May 1972, p. 169–71.

Sea travel can be rewarding for elderly healthy people but supervised air flight to a stable environment may be better for ill or infirm.

*180. Case, Harry W. and others. DRIVING ABILITY AS AFFECTED BY AGE. Los Angeles, Cal., University of California, Institute of Transportation and Traffic Engineering, Mar 1970, 158 p. (PB 193 927)

Two groups, under and over 51, were tested on several performance judgmental conditions. Generally judgmental skills do not decline with age (until senility) and most older drivers make compensatory changes in driving habits to coincide with known physiological deterioration.

181. Carp, Frances M. AUTOMOBILE AND PUBLIC TRANSPORTATION FOR RETIRED PEOPLE. IN Highway Research Board. Highway Research Record No. 348, 1971, p. 182–91. (Main TE 5.3.H5A31 no. 348)

Study finds trends in speed and complexity of traffic tend to lower ex-driver-status age and public transport does not meet needs. Unless transportation is devised to support mobility during retirement, this segment of life will be lonely and inactive instead of self-fulfilling and socially contributive.

*182. ______. CORRELATES OF MOBILITY AMONG RETIRED PERSONS. IN Proceedings of Second Annual Environmental Design Research Conference. Edited by J. Archea and C. Eastmen. Pittsburgh, Pa., Carnegie-Mellon University Press, 1970.

*183. ______. MOBILITY AMONG MEMBERS OF AN ESTABLISHED RETIREMENT COMMUNITY. Gerontologist, v. 12 no. 1, Spring 1972, p. 48–56.

Residents of retirement community have better mobility than their counterparts elsewhere and have more stimulating and satisfying milieu.

*184. ______. MOBILITY OF OLDER SLUM DWELLERS. Gerontologist, v. 12 no. 1, Spring 1972, p. 57–65.

Mobility patterns in a redevelopment area were predictable on basis of ethnicity and social class but decisive factors seemed to be hardware and software of transportation system.

*185. ______. PUBLIC TRANSIT AND RETIRED PEOPLE. IN Transportation and Aging. Edited by Edmund J. Cantilli and June L. Shmelzer. Washington, D.C., U.S. Government Printing Office, 1971, p. 82–92. (See also #23)

Study of retired persons in San Antonio, Texas, reveals infrequent use of public transportation system because of difficulties encountered. Improvements in equipment and services designed to meet needs of elderly and handicapped may make use of public transportation more attractive to nonhandicapped as well.

*186. ______. RETIRED PEOPLE AS AUTOMOBILE PASSENGERS. Gerontologist, v. 12 no. 1, Spring 1972, p. 66–72.

Retired people need flexible transportation, i.e., pick up at home, delivery to destination and return. This should be offered by public or private agencies to supplement help of family and friends.

*187. ______. RETIREMENT TRAVEL. Gerontologist, v. 12 no. 1, Spring 1972, p. 73–8.

For most elderly, trips are infrequent, travel conditions far from ideal and transportation options narrowing because of speed and complexity.

*188. ______. TRANSPORTATION. Gerontologist, v. 12 no. 2, Summer 1972, Part II, p. 11–16. (See also #54)
Transportation was surprise "sleeper" topic of White House Conference on Aging, ranking third after income and health. Discusses recommendations of the conference.

*189. ______. TRANSPORTATION AND THE OLDER PERSON. PERTINENT REFERENCES FROM THE SOCIAL SCIENCES AND OTHER LITERATURE. San Francisco, Calif., Langley-Porter Neuropsychiatric Institute, May 1970.

190. CHICAGO YMCA SENIOR TRANSPORT SERVES 1606, AIDS 48 AGENCIES. Aging, No. 186, Apr 1970, p. 7–8.

191. Cutler, Stephen J. THE AVAILABILITY OF PERSONAL TRANSPORTATION, RESIDENTIAL LOCATION, AND LIFE SATISFACTION AMONG THE AGED. Journal of Gerontology, v. 27 no. 3, Jul 1972, p. 383–9.
Studies indicate that availability of personal transportation is linked to higher life satisfaction.

192. ELDERLY FARE $5 PER MONTH. Passenger Transport, v. 29 no. 25, Jun 18, 1971, p. 8.
Dallas Transit System issues ID card for senior citizen reduced fare program.

*193. ELDERLY RIDERSHIP AND REDUCED TRANSIT FARES: THE CHICAGO EXPERIENCE. Chicago, Ill., Department of Human Resources, Division for Senior Citizens, Aug 1970, 28 p. (PB 209 228)
Survey to determine impact of reduced fare program on both elderly and transportation system itself, as well as to provide systematic data to enable other municipalities to determine feasibility of such a program.

194. ELECTRIC BUS TRANSPORTS AGING IN WISCONSIN PROJECT. Aging, No. 223, May 1973, p. 16.
Dial-a-bus transport for older people is electric battery powered, radio dispatched and features foldout ramp.

*195. Environmental Design Group. PLAN TO IMPROVE TRANSPORTATION FOR THE ELDERLY IN ORANGE, SEMINOLE AND OSCEOLA COUNTIES. Winter Park, Fla., 1973, 55 p. (PB 230 992) (Main HE 4487.F6E79)
$583,000 demonstration project to increase mobility of elderly and their consequent opportunity for fuller participation in community life.

*196. Finesilver, Sherman C. THE SENIOR DRIVER IN THE UNITED STATES: A FINAL REPORT ON LICENSING, DRIVING RECORD, TRAINING AND INSURABILITY, INCLUDING COMPENDIUM OF SIGNIFICANT FINDINGS. Denver, Colo., University of Denver, Mar 2, 1970, 42 p.

*197. Friedsam, H.J. and C.A. Martin. TRAVEL BY OLDER PEOPLE AS A USE OF LEISURE. Gerontologist, v. 13, Summer 1973, p. 204–7.

198. Hoel, Lester A. and Ervin S. Rozner. IMPACT OF REDUCED TRANSIT FARES FOR THE ELDERLY. Traffic Quarterly, v. 26 no. 3, Jul 1972, p. 341–58. (See also #214)
Examines only ridership behavior of elderly presently served by public transit, Allegheny County, Pa. Substantial increase in ridership and gain in new riders shown as result of fare reduction.

199. HOW SAFE ARE SENIOR DRIVERS? Traffic Safety, Apr 1969, p. 20–1.
Study of aging drivers by University of Denver College of Law enhances older driver's image. (See also #196)

200. Markovitz, Joni K. TRANSPORTATION NEEDS OF THE ELDERLY. Traffic Quarterly, v. 25 no. 2, Apr 1971, p. 237–53.
Surveys travel patterns of elderly to determine intensity of their transportation demand, how well this demand is met, and whether their mobility can be improved through better transportation.

*201. Morlok, Edward K. and others. THE EFFECT OF REDUCED FARE PLANS FOR THE ELDERLY ON TRANSIT SYSTEM ROUTES. Final Report. Evanston, Ill., Northwestern University, Transportation Center, Mar 1971, 205 p. (PB 204 058)

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Appendix D

Report By Comptroller General Of The United States: Further Action Needed To Make All Public Buildings Accessible To The Physically Handicapped

Comptroller General's Report To The Congress

DIGEST

The Congress should amend existing legislation to:

- Impose a clear statutory mandate that Federal agencies named in the Architectural Barriers Act insure that public buildings are made accessible to the physically handicapped.
- Include within the coverage of the Act all Government-leased buildings and facilities intended for public use or in which the physically handicapped might be employed as well as all privately owned buildings leased to the Government for public housing.
- Require that agencies named in the Act establish a system of continuing surveys and investigations to insure compliance with prescribed standards.
- Remove the present exemption of the U.S. Postal Service from coverage by the Architectural Barriers Act. (See pp. 36 to 37.)

Specific language for clarifying the Federal laws is provided in this report. (See pp. 37 to 39.)

The act authorized the General Services Administration and the Departments of Housing and Urban Development and Defense, in consultation with the Department of Health, Education, and Welfare, to prescribe standards which would result in buildings being accessible to the physically handicapped.

These Departments agreed to adopt the American National Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, A117.1-1961, as criteria to be followed in achieving barrier-free buildings. (See pp. 2 and 78.)

Although adoption of the Standard was a great step forward in promoting accessibility, the Standard's range is minimal, and its coverage of buildings, facilities, and situations is limited. (See pp. 30 to 34.) Federal agencies have neither considered the applicability of the Standard to their construction needs nor modified the Standard to cover their particular types of construction. (See pp. 42, 56, 69, and 78.)

The Standard in particular does not cover all portions of residential structures under responsibility of the Department of Housing and Urban Development. (See p. 56.)

Agencies have used the Standard for 6 years with only minor administrative exceptions. (See p. 78.) Efforts to establish new standards have only recently been made.

The Architectural and Transportation Barriers Compliance Board should coordinate the development of standards by those agencies charged with construction responsibility to eliminate all barriers. (See p. 39.)

GAO's findings are based on inspections of 314 federally financed buildings and/or building plans located in 66 geographical areas of 35 States and the District of Columbia. All buildings inspected were constructed, altered, or leased after enactment of the Architectural Barriers Act in August 1968. (See p. 4.)

GAO's recommendations to each agency are in chapters 4, 5, 6, and 7.

CHAPTER 1

Introduction

Estimates of the number of physically handicapped people in the United States range from 18 to 68 million, depending mainly on how handicapped is defined. Although the severity of their handicaps vary, these individuals all have basic physical disabilities which restrict their daily activities. These disabilities include impairments that confine individuals to wheelchairs or necessitate the use of braces or crutches; blindness or deafness which affects an individual's safe functioning in a public area; or decreased mobility resulting from aging, accident, or disease.

If the handicapped cannot enter and use public buildings, they cannot easily vote, obtain government services, conduct business, or become independent and self-supporting. Efforts to enhance talents and market job skills become meaningless when the job site and usual places of business are inaccessible.

Accessibility of public buildings is essential if the handicapped are to have the same rights and opportunities as the able bodied in obtaining government services and employment outside their homes.

Congressional Mandate to Eliminate Architectural Barriers

The Vocational Rehabilitation Act, amended in 1965 to expand the public program for rehabilitating the handicapped, authorized the National Commission on Architectural Barriers. The Commission grew out of a congressional desire to eliminate architectural barriers and to establish plans for further action.

The congressional mandate climaxed the efforts of the public and nonprofit groups that had worked to secure voluntary compliance with the American National Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, A117.1-1961 (ANSI Standard).

The ANSI Standard was developed by the President's Committee on Employment of the Handicapped, the National Society for Crippled Children and Adults, and various Federal and private agencies and was field tested by disabled students from the University of Illinois. On October 31, 1961, the American National Standards Institute, established to coordinate the development of voluntary national standards, issued the ANSI Standard. The Standard was distributed throughout the United States by various organizations, including the National Easter Seal Society for Crippled Children and Adults.

By 1965, 24 States had taken some kind of legislative action to eliminate architectural barriers in public buildings. Much of the legislation, however, was too discretionary and not comprehensive in coverage. Too few public buildings were being constructed barrier free. There had been no concerted local efforts to activate an accessibility program. At the Federal level, no Government-wide order had been issued to insure elimination of barriers in the design and construction of federally assisted projects.

In 1967 the Commission recommended to the Congress legislation requiring accessibility in all buildings leased or owned by the Government or constructed with Federal funds. On August 12, 1968, the Congress enacted Public Law 90-480, known as the Architectural Barriers Act of 1968 (82 Stat. 718, 42 U.S.C. 4151 *et seq.*). The Act's purpose was to insure that certain federally funded buildings were designed and constructed to be accessible to the physically handicapped. (See app. I.)

Included in the act were federally financed buildings in which a physically handicapped person might live or work and buildings intended for public use. Privately owned residential structures and those on a military installation to be used primarily by able-bodied military personnel were specifically excluded.

Sections 2, 3, and 4 of the Act authorized the Administrator of the General Services Administration (GSA) and the Secretaries of Housing and Urban Development (HUD) and Defense (DOD), each in consultation with the Secretary of Health, Education, and Welfare (HEW), to prescribe standards for the design, construction, and alteration of buildings. In practice, each agency followed the ANSI Standard, which by that time had been adopted by numerous States and Federal agencies.

Section 6 of the Act authorized each agency (1) to make whatever surveys and investigations deemed necessary to insure compliance with the standards and (2) to modify or waive the standards on a case-by-case basis upon application by the head of the agency involved.

The Architectural Barriers Act brought the Federal Government to the level of legislative initiative already reached in 1968 by 34 States.

Public Law 91-205, approved March 5, 1970, amended the Architectural Barriers Act to make it applicable to the Washington, D.C., Metro subway facilities now under construction.

Section 502 of the Rehabilitation Act of 1973 (87 Stat. 391, 29 U.S.C. 792), enacted on September 26, 1973, created an Architectural and Transportation Barriers Compliance Board.

The Board's functions include:

- Insuring compliance with the standards prescribed by GSA, DOD, and HUD pursuant to the Architectural Barriers Act.

- Initiating investigations on the nature of architectural, transportation, and attitudinal barriers confronting the handicapped, particularly with respect to public buildings and monuments, parks and parklands, public transportation systems, and residential and institutional housing.
- Considering the housing needs of the handicapped.
- Determining how and to what extent transportation barriers impede the mobility of the handicapped and considering ways in which their travel expenses to and from work can be met or subsidized.
- Determining the actions being taken by other governmental units and public and nonprofit agencies and preparing proposals for consolidating the efforts of agencies, organizations, and groups whose cooperation is essential for effective and comprehensive action.
- Conducting investigations, holding public hearings, and issuing such orders as it deems necessary to insure compliance with the Act's provisions.
- Making recommendations to the President and to the Congress for administration and legislation as deemed necessary or desirable to eliminate architectural, transportation, and attitudinal barriers to the handicapped.

The Board was established as an independent body composed initially of eight agencies–HEW; HUD; GSA; the Departments of the Interior, Labor, and Transportation; the Veterans Administration; and the Postal Service–with no single agency as head. On December 7, 1974, section 502 was amended by section III of the Rehabilitation Act Amendments of 1974 (88 Stat. 1617) to:

- Make DOD a Board member.
- Make the Secretary, HEW, or his designee, Chairman of the Board.
- Give the Board authority to appoint a consumer advisory panel, a majority of whose members would be handicapped, to give the Board guidance, advice, and recommendations.
- Give the Board authority to withhold or suspend Federal funds to any building found not to be in compliance with standards prescribed pursuant to the Architectural Barriers Act, as amended.

By 1974 all 50 States and the District of Columbia had, through legislation, executive directives, or building codes, required the elimination of architectural barriers in public buildings.

Scope of Review

We inspected 314 federally financed buildings and/or building plans in 66 geographical areas of 35 States and the District of Columbia. (See apps. III and IV.) We tried to achieve regional and agency balance and, as much as possible, buildings were randomly selected.

We performed the inspections from July through December 1974, using a checklist based on the ANSI Standard to judge the buildings. (See app. II.) All inspected buildings were constructed, altered, or leased after enactment of the Architectural Barriers Act in August 1968.

Although more than 30 Federal agencies have construction and leasing authority and authority to fund construction through grants and loans, our review was limited to GSA, HUD, DOD, and HEW, which were given statutory responsibilities under the Act.

To determine whether these agencies effectively administered the Act, we assessed the

- clarity and adequacy of policy guidance and instructions,
- action taken in prescribing standards for making buildings accessible,
- procedures for modifying or waiving the prescribed standards, and
- procedures for reviewing and evaluating compliance with the prescribed standards.

We discussed the problem of accessibility in public buildings and the ANSI Standard with physically handicapped persons, architects, and representatives of national and local organizations for the handicapped. (See app. V.)

In addition, we developed information on the cost of making buildings barrier free.

Letter of Statement and Response to Report by A&TBCB

September 25, 1975

Honorable Abraham A. Ribicoff
Chairman, Committee on Government
Operations
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

The Architectural and Transportation Barriers Compliance Board (A&TBCB) submits herewith its statement and response pursuant to the Comptroller General's July 15, 1975, Report to Congress entitled, "Further Action Needed To Make All Public Buildings Accessible To The Physically Handicapped."

The Board would like to commend the General Accounting Office for its excellence in efforts to prepare a very thorough documentation and analysis of the actions of the Departments of Health, Education and Welfare; Defense; Housing and Urban Development; and General Services Administration in implementing the Architectural Barriers Act of 1968 (P.L. 90-480).

As you know, the Board was established under the Rehabilitation Act of 1973 (P.L. 93-112) to insure compliance with the standards prescribed pursuant to P.L. 90-480, as amended by the Act of March 5, 1970 (P.L. 91-205). Further, the Board is equally responsible for initiating investigatory, evaluative, and developmental approaches into the many categories of environmental barriers confronting handicapped individuals, and becoming a major national force for the elimination of such barriers. Through these and other legislative mandates, the Board was made the responsible force for providing the necessary administrative leadership, direction, and oversight of all Federal activities necessary for creating a barrier-free environment pursuant to P.L. 90-480. Relative to the performance of this mission, the Board has many concerns arising from the General Accounting Office Report's legislative recommendations to Congress, and administrative recommendations to the aforementioned agencies, as well as to the Architectural and Transportation Barriers Compliance Board.

The Board notes that the Report places significant emphasis upon the inactivity of the responsible agencies in developing and promulgating updated and comprehensive standards of accessibility necessary to meet the unique requirements of each agency's particular type of construction activity.

As one measure to correct this situation, the Report recommends that the A&TBCB "coordinate the development of standards by each agency charged with such responsibility, to insure that such standards are adequate to eliminate barriers to the physically handicapped in Federally financed buildings." It is our understanding that coordination in this sense would confer upon the Board the responsibility to assure concerted Federal action and responsiveness in the development and revision of standards, animated by the common purpose and shared goals of the Board, and utilizing the practiced skills in each of its members agencies.

It is believed that this function can best be administered by a quasi-independent agency possessive of the necessary staff expertise and supportive membership and assistance of each of the primarily affected agencies. Further, we are of the opinion that this recommendation is both consistent with, and supportive of the Board's functions to insure Federal compliance with the prescribed standards, initiate investigatory and developmental activities into the nature of all categories of barriers, and bring together diverse Federal, State and local governmental bodies, private organizations and groups into a cooperative relationship in support of common objectives.

In this regard it should be noted that consistent with Section 3(b), "Declaration of Purpose" of the Rehabilitation Act of 1973 (P.L. 93-112), the Architectural and Transportation Barriers Compliance Board has contracted with the National Academy of Sciences, Building Research Advisory Board, to provide the necessary services to assist the Federal Government in coordinating efforts to develop effective criteria for design, construction and alteration of Federally owned, and leased buildings and facilities to make them accessible, functional, and safe for mentally and physically handicapped individuals. The project activities will include the evaluation and analysis of all current and in-development design criteria and construction standards to identify deficiencies and voids that require modification to adequately meet the needs of handicapped persons. Further, the project will develop comprehensive criteria suitable for voluntary adoption as agency standards for the design, operation and maintenance of all public buildings, and monuments, parks and parklands, public transportation facilities, and residential and institutional housing. The project is being undertaken with the active participation of design experts in the Departments of Defense; Housing and Urban Development; Health, Education and Welfare; General Services Administration; and the Veterans Administration, and it is anticipated that the project will be of a continuing nature with future supportive resources to be requested from the member agencies of the Architectural and Transportation Barriers Compliance Board.

The Board appreciates the opportunity to comment on the Comptroller General's Report and stands ready to assume its responsibilities for insuring that disabled individuals are afforded full and equal access to our environment.

Sincerely,

/s/ Stanley B. Thomas, Jr.

Stanley B. Thomas, Jr.
Chairman

Identical letters sent to:
- Hon. Jack Brooks, Chairman, Committee on Government Operations, House of Representatives
- Hon. Frank Horton, House of Representatives*
- Hon. Charles H. Percy, United States Senate*

*Minority Committees on Government Operations

TESTIMONY

by

STANLEY B. THOMAS, JR.
Chairman
Architectural and Transportation Barriers Compliance Board

before the

U.S. House of Representatives
Subcommittee on Investigations and Review
Committee on Public Works

Hearings on

Report to the Congress by the
Comptroller General of the United States
on
Further Action Needed to Make All Public
Buildings Accessible to the Physically Handicapped

October 7, 1975

On behalf of the Architectural and Transportation Barriers Compliance Board, I would like to extend my appreciation for this opportunity to present testimony regarding the Board's responsibilities and actions pursuant to the Architectural Barriers Act of 1968.

Before discussing the functions and related activities of the Board, I would like first to reiterate our commendation to the General Accounting Office for its excellent documentation of agency activities in implementing Public Law 90-480. The report makes evident the difficult task confronting the Compliance Board in overseeing the construction related activities of the Federal government. Further, the report findings manifest the confusion and conflict of agency roles and responsibilities under Public Law 90-480, resulting in the apparent failures on the part of the Federal establishment in initiating comprehensive and effective action for the development, promulgation, and regulation of barrier-free standards.

As a result of well documented surveys and investigations, the failings of governmental agencies in this area are obvious.

Past failures to the full implementation of Public Law 90-480 can be attributed to: the absence of any one central agency or force clearly responsible under the statute or by administrative arrangement for insuring the comprehensive and consistent development of Federal standards; the lack of representation of the handicapped community and active participation of handicapped individuals in issue identification and policy formulation; and limited enforcement of barrier-free construction standards with respect to all that is Federally assisted.

Clearly, the GAO report attests to the need of a strong administrative force to comprehensively provide the necessary Federal leadership, direction, and oversight over barrier related activities, and thereby, become a positive national focal point for the elimination of all categories of environmental barriers.

To this end, the Architectural and Transportation Barriers Compliance Board was established in Section 502 of the Rehabilitation Act of 1973 (P.L. 93-112). Statutory membership to the Board includes the Cabinet Level officials (or their Executive Level IV designees) of the Departments of Health, Education, and Welfare; Transportation; Housing and Urban Development; Labor; Interior; Defense; the General Services Administration; United States Postal Service; and Veterans Administration. A primary purpose of the Board is to insure Federal-wide compliance with the prescribed standards of accessibility developed by the responsible agencies pursuant to Public Law 90-480. In carrying out its regulatory responsibilities, the Board is empowered to issue a final and binding order of compliance which may include the suspension or withholding of Federal funds with respect to any building or facility of any department, agency, or instrumentality of the United States.

In addition, the Board has a primary responsibility for initiating investigatory, evaluative, and developmental approaches into all categories of environmental barriers confronting handicapped individuals, particularly with respect to public buildings, monuments, parks and parklands, public transportation (including air, water, and surface transportation whether interstate, foreign, intrastate, or local), and residential and institutional housing.

Toward achieving its investigative mandate and role as a major national force in the elimination of barriers, the Board was given authority to conduct investigations, hold public hearings, and prepare and submit to Congress and the President plans and proposals for such further legislative and administrative actions necessary to secure a barrier-free environment.

In order to secure the information sought by Congress, and to develop the Board's comprehensive programs, the Board has recognized that it is necessary to identify and bring together the many agencies, organizations, groups, and individuals already working toward related goals, whose cooperation is essential to effective and comprehensive action.

Accordingly, the Board has conducted national hearings in the areas of transportation and housing, and is actively engaged in programmatic, working relationships with those national organizations concerned with and involved in ensuring accessibility of facilities for handicapped individuals. In addition, the Board has developed close working relationships with the many consumer organizations of the handicapped, and has solicited their representation or active participation in a number of the activities. In a similar effort, the Board is currently working to establish a Consumer Advisory Panel, at least half of whose membership shall be comprised of handicapped individuals, to provide advice, guidance, and recommendations to the Board in carrying out its functions. In addition, the Board has been actively providing technical assistance to Federal agencies, states, and localities in their activities relative to environmental barriers As an example of this activity on a Federal level, the Board has been providing technical assistance regarding the construction and modification plans for barrier removal to the Washington Monument, Jefferson and Lincoln Memorials, National Visitor's Center, Constitutional Gardens, and other related projects in the White House and Ellipse areas.

While these activities may initially appear unrelated to the special concerns of the Subcommittee, I believe that only through mounting a concerted and cooperative effort on the part of the public, private, and consumer sectors will success be achieved under any barrier-free related activity.

On the basis of its statutory functions and broad mission, the Board fully concurs with the GAO recommendation to coordinate the development of standards to ensure their adequacy. The recommendation is consistent with the Board's stated goal of assuring the evaluation and revision of the ANSI standards on a systematic and continuing basis. Further, the recommended action is supportive of the Board's role to act as the responsible force for providing the administrative leadership, direction, and oversight of all Federal activities pursuant to Public Law 90-480.

While it should be recognized that the Board has no statutory responsibilities under Public Law 90-480, it is noted that in support of the Board's assumed lead role under Public Law 93-112, the Secretary of Health, Education, and Welfare will exercise his consultative responsibilities and recommend action in his capacity as statutory chairman of the Board. This procedural arrangement will facilitate responsiveness to the GAO recommendations that the Secretary of Health, Education, and Welfare take a leadership role in revising agency prescribed standards when necessary, and that the Board coordinate the standards development activity to ensure their adequacy.

In order to assure the full utilization of barrier-free design standards in Federally assisted programs, the Board is currently developing a compliance mechanism to monitor all Federally supported building activities. To this end, the Board staff is currently engaged in negotiations with a major contractor to assist in the early development, operation, and maintenance of its compliance system. It may be of interest to the Subcommittee to know that as part of the Board's compliance program, there will be a systematic and continuing review of the agencies' central and regional procedures in design review, construction related granting and contracting activities, data gathering, record keeping, and issuance of internal guidance materials.

In support of the compliance system, efforts are not being initiated for the development of regulations and guidelines for the operation of compliance system components within each of the affected agencies.

In addition, the Board has contracted with the National Academy of Sciences, Building Research Advisory Board to provide services to assist the Federal Government in the evaluation, revision, and expansion of all existing accessibility related standards. The project will also serve to provide necessary assistance for the coordination of all related Federal standards development activities, thereby assuring the comprehensiveness and consistency of such efforts. The project is being undertaken with the active participation of handicapped individuals, design and construction experts of the private and public sectors, with representation including but not limited to those agencies charged with standards development responsibilities under Public Law 90-480.

In summary, significant progress is being made in efforts to remove those obstacles which prevent the full and coordinated implementation of Public Law 90-480.

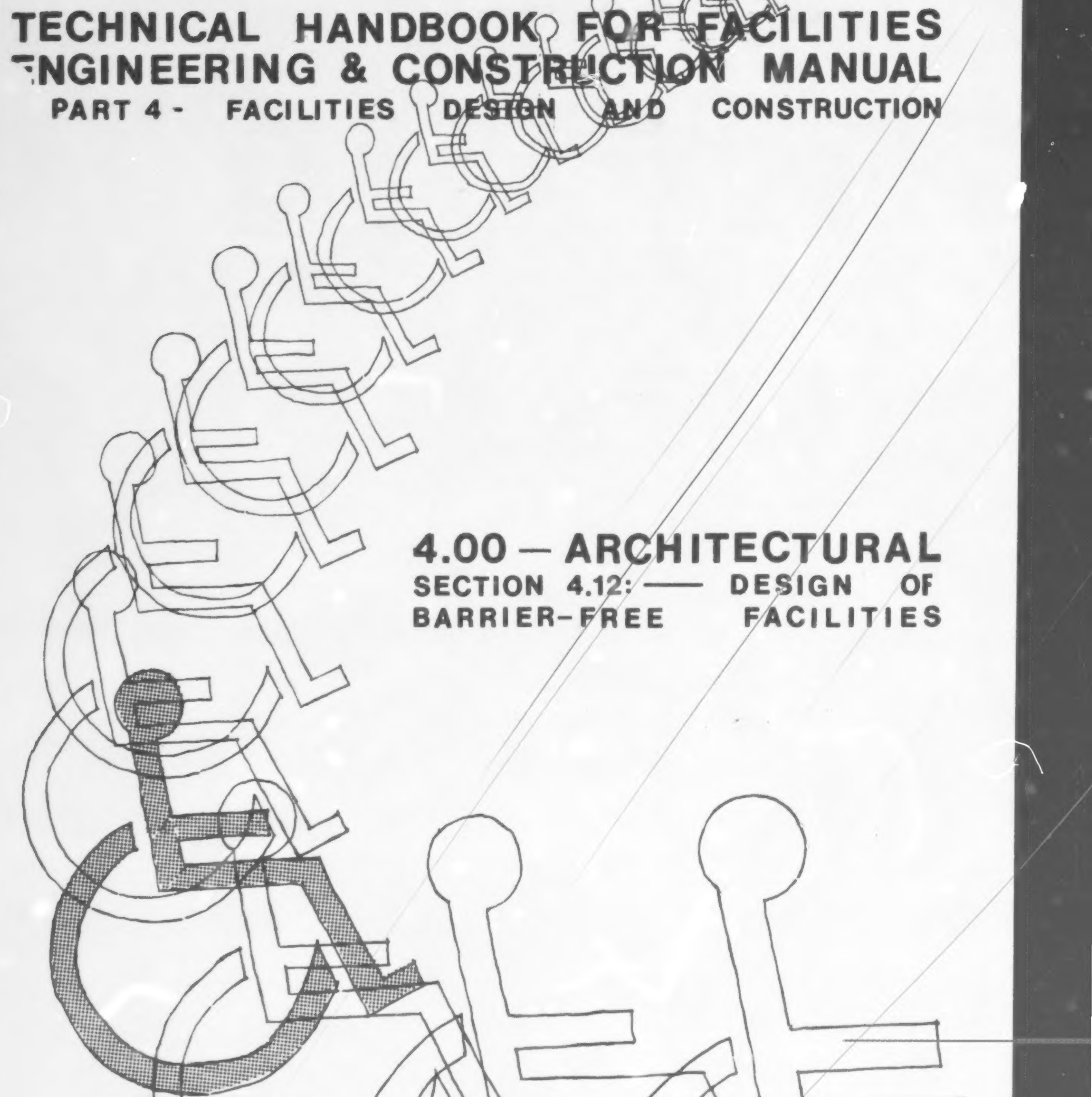
Mr. Chairman, we appreciate this opportunity to appear before the Subcommittee, and will be pleased to address any questions or concerns that the Subcommittee may have.

Appendix E

Technical Handbook for Facilities and Engineering and Construction Manual, Section 4.12: Design of Barrier-Free Facilities

TECHNICAL HANDBOOK FOR FACILITIES ENGINEERING & CONSTRUCTION MANUAL

PART 4 - FACILITIES DESIGN AND CONSTRUCTION



4.00 — ARCHITECTURAL

SECTION 4.12: —— DESIGN OF BARRIER-FREE FACILITIES

OFFICE OF THE SECRETARY - DEPARTMENT TECHNICAL HANDBOOK SERIES: DEPARTMENT STAFF MANUAL SYSTEM

FOREWORD

This handbook, Part 4, Series 4.12, Design of Barrier-Free Facilities, is for use in all DHEW facilities programs.

The material in this handbook supplements and amplifies Federal Property Management Regulation 101-17 and American National Standard A117.1-1961 (R1971). It is presented in a checklist format designed to be useful in administering the regulations.

It is recognized that a number of agencies and institutions are presently conducting research and developing new data concerning barrier-free design. As soon as authoritative new material is available it will be incorporated into this handbook.

This handbook was developed by the Office of Facilities Engineering and Property Management/Assistant Secretary for Administration and Management, with the concurrence of the Assistant Secretary for Human Development and the Chairman, Architectural and Transportation Barriers Compliance Board.

Recommendations or suggestions for the improvement of this handbook are invited and should be sent to:

Director – Office of Architectural and Engineering Services
OFEPM/DHEW
330 Independence Avenue, S.W.
Washington, D. C. 20201

Approved for DHEW facilities by:

Gerrit D. Fremouw

Gerrit D. Fremouw, P.E.
Director
Office of Facilities Engineering and
Property Management

ACKNOWLEDGMENTS

A draft of this handbook was reviewed by the representatives of various organizations interested in barrier-free design. All comments and suggestions were carefully considered and many were adopted. Some recommendations were found to be in conflict with ANSI A117.1 or the majority of the reviewers and therefore were not used. Comments from the following sources are gratefully acknowledged:

American Association on Mental Deficiency
American Institute of Architects
California Department of Rehabilitation
Easter Seal Society (Seattle, Washington, Office)
General Services Administration
Industrial Designers Society of America
National Society of Interior Designers
Paralyzed Veterans of America
President's Committee on Employment of the Handicapped
President's Committee on Mental Retardation
State Department of Works, Brisbane, Australia
U.S. Department of Health, Education, and Welfare
    Assistant Secretary for Human Development
    Health Resources Administration, Division of Facilities Utilization (Hill-Burton)
    Office of Facilities Engineering and Property Management–The 10 Regional Offices
    National Institute of Mental Health
    Social and Rehabilitation Service
U.S. Department of Housing and Urban Development
Veterans Administration

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HOW TO USE THIS HANDBOOK

At the front of this handbook is a checklist which forms a concise summary, using key phrases, of the major criteria contained in the text. The number to the right of each phrase refers to a paragraph in the handbook which more fully describes the requirements for that item. The checklist may be used to assess the conformity of a specific project or an existing facility.

An asterisk at the left of an item indicates that the item is covered specifically by the ANSI A117.1 Standard.

CHECKLIST FOR BARRIER-FREE DESIGN

PROJ. NO. ________ INSTITUTION ________________________ BLDG. NAME ____________

ADDRESS ______________________ CITY ____________ STATE ____________ C.D. ____

*Mandatory item covered by ANSI A117.1 Standard

	Passenger Arrival	
	____ Adequate Place	(2.1)
	Parking	
	____ Special stalls with pedestrian access and controls	(2.2.4)
*	____ Accessible to building by level or ramped path	(2.2.5)
	Walks	
*	____ 48" wide minimum	(2.3.1)
*	____ 5% maximum gradient (rest areas if greater than 3%)	(2.3.2)
*	____ Firm, non-slip materials	(2.3.3)
*	____ Free of gratings, manholes, etc.	(2.3.4)
*	____ Curb cuts at streets, driveways, parking lots	(2.3.5)
*	____ Level platforms at doors	(2.3.6)
	Ramps (Exterior and Interior)	
*	____ 8.33% maximum gradient (1 foot rise in 12 feet)	(2.4.2)
*	____ Firm, non-slip surfacing	(2.4.3)
	____ Free of gratings	(2.4.4)
*	____ Level approaches, Landings at 30 ft. intervals	(2.4.5-6)
*	____ Handrails 32" high, extend 12" beyond ramp	(2.4.7)
	____ Guardrails or walls	(2.4.8)
	____ Well illuminated	(2.4.9)
	Entrances	
*	____ At least one major entrance accessible by wheelchair	(3.1)
	____ Level approach platform	(3.1.2)

FORM FEC 4-24 (10/74) (Rev. 9/75) SHEET 1 of 4

Doors

* _____32" wide clear opening (3.2.1)

* _____Single effort with 8 lbs. pressure maximum (3.2.1)

* _____Level approaches and clearance at sides of door (3.2.3)

_____Vestibules with 6'–6" separation between doors (3.2.4)

* _____Thresholds flush or beveled at 8% maximum slope (3.2.5)

_____Kickplates 16" high (3.2.6)

_____Closers with time delay and 8 lbs. maximum tension (3.2.7)

_____Handles maximum 42" height (3.2.8)

_____Vision panels at 36" maximum above floor (3.2.9)

Corridors, Public Spaces, Work Areas

_____Corridors 60" minimum width (3.3.1)

_____Recessed doors when opening into corridors (3.3.2)

* _____Floors on common level (3.3.4)

* _____Non–slip floor materials; non-carpeted circulation paths; transition strips (3.3.5)

Stairs

_____42" minimum width (3.5.1)

* _____7" maximum risers (3.5.2)

* _____Non-projecting nosings (3.5.3)

_____Non-slip treads (3.5.4)

_____Level, differentiated approaches (3.3.5)

* _____Handrails 32" high, 18" beyond top & bottom steps (3.5.6)

_____Well illuminated (3.5.7)

FORM FEC 4-24 (10/74) (Rev. 9/75)

Elevators

* _____Accessible to each floor level (3.6.1)

* _____Cab size minimum 60" x 60" or 63" x 56" (3.6.3)

* _____Door clear opening 32" minimum (3.6.4)

_____Handrails at 32" high (3.6.5)

* _____Automatic and self-leveling (3.6.6)

_____Doors with safety closing devices (3.6.7)

_____All controls 48" maximum from floor (3.6.8)

_____Controls and signals usable by blind persons (3.6.2;3.6.8)

_____Emergency routes and plans (3.6.10)

Toilet Facilities

_____Minimum 1 per sex per floor (3.7)

* _____Entrance clearances (door widths, vestibule size) (3.7.1)

* _____Floor level with corridor (3.7.2)

_____Side transfer compartment, 66" wide x 60" deep, OR (3.7.4)

    *_____Compartment 36" x 56" with 32" clear opening (3.7.5)

* _____Grab Bar(s) at side of w.c., 33" high (3.7.4;3.7.5)

* _____Wall-hung w.c., 20" high (3.7.4;3.7.5)

* _____Lavatory with 30" clear space underneath (3.7.6)

* _____Faucets easily operated, pipes insulated (3.7.6)

* _____Urinal wall-mounted at 19", or at floor level (3.7.7)

* _____Mirrors, shelves, dispensers usable from lav. at 40" max. ht. (3.7.8–9)

_____Shower stalls with folding seats, grab bars, special controls. (3.7.10)

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SHEET 3 of 4

Drinking Fountains

_____Minimum one per floor for handicapped (3.8)

* _____Hand lever operated with up-front jet and controls (3.8.1)

_____Wall-mounted, projecting basin at 33" maximum ht. (3.8.2)

_____Alcoves 60" wide if used (3.8.3)

Public Telephones

* _____At least one per bank accessible (3.9)

* _____Dial, handset & coin slot maximum 48" high (3.9.2)

* _____One per bank for hard-of-hearing (3.9.3)

Controls

* _____Alarms, switches, etc. within 48" of floor (3.10.1)

Identification and Warning

_____Access symbol displayed at entrances (3.11.1)

* _____Raised numerals 60" high at sides of doors (3.11.2)

* _____Knurled door handles at danger areas (3.11.3)

_____Abrasive floor strips at open danger areas (3.11.3)

* _____Warning signals both visible and audible (3.11.4)

* _____Construction site barricades (3.11.5)

Special Use Spaces

_____Dining Areas: access & clearances (3.12.1)

_____Spectator Spaces: wheelchair stations (3.12.2)

_____Laboratories: wheelchair stations (3.12.3)

_____Libraries: wheelchair access & clearances (3.12.4)

_____Audio-Visual Control Rooms: access (3.12.5)

_____Bedrooms: clearances, furniture, storage (3.12.6)

Record Keeping

_____Compliance Statement included in project file
(See FPMR 101-17.706, "Record Keeping.")

SHEET 4 of 4

FORM FEC 4-24 (10/74) (Rev. 9/75)

Certifying Signature _____ Date _____

CHAPTER 1 – GENERAL INFORMATION

1.1 Purpose and Scope

This handbook is intended to aid building designers, program officials, grantees, and facilities managers in eliminating architectural barriers to the physically handicapped in both existing and new facilities. Application of these guidelines should permit access to and free movement within DHEW facilities by persons with a wide range of disabilities.

Public Law 90-480 and subsequent implementing regulations require all DHEW projects to comply with the American National Standard A117.1-1961 (Reaffirmed 1971) titled "Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped." The material in this handbook is based principally, but not entirely, on this standard. Paragraphs specifically covered by the standard are marked with an asterisk. (*)

The use of the word "shall" or "must" in the text indicates that the item is required in order to conform to Public Law 90-480. The word "should" indicates that the item is highly recommended as a means of making the environment accessible.

This material applies to all DHEW and DHEW-sponsored buildings. The numerical need for a specific item may vary with the type of building. Careful application of these criteria will be required to satisfy the needs of the handicapped and yet avoid costs that are at great variance with the benefits received.

In most new construction, the additional cost of making a facility barrier-free is negligible and should not interfere with the application of these standards. The remodeling of existing structures does involve additional costs which vary widely.

Where it is determined by the building designer (the A/E) that full compliance with this handbook is impractical, it is suggested the designer submit a list of non complying items and the reasons for noncompliance. (See FPMR 101-17.704, "Exceptions").

1.2 The Handicapped Population

Physical disability is a national problem affecting millions of people in all parts of the country, in all age groups, and in all occupations. Degree of disability ranges from the wheelchair-bound paraplegic to the athlete temporarily on crutches with a broken leg. Those whose mobility is impaired - wheelchair and crutch users, the arthritic, aged, blind and deaf - comprise about 12% of the U.S. population, a minority of significant proportions.

1.2.1 Types of Disability

The term "physically handicapped," as used in this handbook, includes persons in the following categories:

a. Non-ambulatory disabilities - those which confine the individual to a wheelchair.
b. Semi-ambulatory disabilities - those which allow the individual to walk with difficulty, perhaps with the aid of braces or crutches. This may include amputees, arthritics, victims of stroke and partial paralysis, cardiac and pulmonary patients, and the grossly over-weight.

c. Disabilities of incoordination or palsy due to brain or nerve injury, which impair the individual's mobility.
d. Sight disabilities - blindness or impaired visual ability to perceive signals or dangerous situations.
e. Hearing disabilities - deafness or impaired ability to hear warning signals or communicate.
f. General disabilities due to aging, which reduce the individual's mobility, perception, and coordination.
g. Temporary disabilities due to broken limbs, sprains, illness, pregnancy, etc.

Mental retardation is not included as such in this list of physical handicaps. However, many mentally retarded individuals have impaired physical abilities and benefit from barrier-free design.

1.2.2 An Increasing Population

The number of handicapped persons has increased as the general population has grown, as traffic accidents have risen, as war veterans have come home, and as medical knowledge and care have improved. Prior to World War II, a man with a severed spinal cord had a life expectancy of six months from the date of injury. Today he may be expected to live a full chronological life, often in a wheelchair. Modern medicine has similarly improved the outlook for those with many other disabilities. This means not only more surviving handicapped but also a more mobile, energetic, and able handicapped population.

1.2.3 An Economic Resource

Federal, state, and local governments are spending millions of dollars each year in vocational rehabilitation programs to help restore disabled youth and adults and return them to productive lives. This important national investment has produced impressive results. Physically handicapped individuals can perform effectively in most jobs. They are often highly motivated as well, resulting in good work habits and comparatively few absences.

Unfortunately, too many jobs are off limits to the handicapped merely because they are located in buildings made inaccessible by architectural barriers: stairs and curbs, revolving doors, narrow restroom doors, inaccessible elevators, too-high telephones, drinking fountains, and light switches, slippery floors, steep ramps or walks, and distant parking. The physical design of the facilities they must use is the greatest single obstacle to the handicapped –more so than the disabilities per se. The value to society of having the disabled population more fully independent and usefully employed outweighs the relatively small cost of making facilities accessible.

1.2.4 Psychological Barriers

As more and more of the physically handicapped become active participants in community life, accommodating them becomes a crucial problem. Most disabled persons want to be as self-sufficient as possible. They are trained and equipped to care for themselves, even drive cars, and yet find themselves dependent on others to enter and use most public facilities.

Architectural barriers tend to force the handicapped into seclusion rather than subject themselves to the dangers, discomforts, and humiliation they often encounter in contact with non-disabled people. Public unawareness or apathy toward their environmental problems can only be interpreted as cruelly thoughtless discrimination, effectively reducing them to being second-class citizens.

The handicapped person does not want to be the object of misdirected pity. He simply wants to be an individual, to move about as he chooses, and to contribute what he can. Owners, designers, and managers of buildings can no longer afford to build and maintain facilities designed solely for the average able-bodied person.

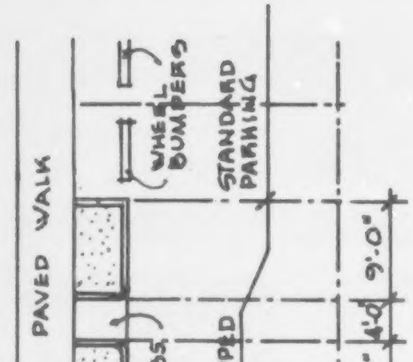
CHAPTER 2 – SITE CONSIDERATIONS

2.1 Passenger Arrival

A safe place, located either on or off the street, should be designated for passengers to get into and out of cars.
It should be:

2.1.1 As near as possible to the building entrance provided for the handicapped.
2.1.2 Zoned to prohibit parking.
2.1.3 Provided with a ramp to sidewalk level, if located at curbside.
2.1.4 Protected from weather by canopy over entrance.

2.2 Parking



Special parking spaces shall be provided in accordance with the frequency and persistency of use by the handicapped. It is suggested that not less than one percent of all parking spaces in any project (with a minimum of two spaces) be so designated.
Spaces provided must be:

* 2.2.1 As near as possible to the building entrance provided for the handicapped, with a maximum travel distance of 200 feet.
* 2.2.2 Identified and controlled for use by individuals with physical disabilities. (NOTE: See Section 3.11.1 for wheelchair symbol).
* 2.2.3 Planned so that travel behind parked cars or across traffic lanes is not necessary.
* 2.2.4 A minimum of nine feet in width, with a four-foot wide pedestrain access aisle on one side of the space.
(NOTE: Spaces parallel to a curb (4 inch high maximum) on the building side of the parking area are desirable. If perpendicular parking is necessary, four-foot wide access aisles between every other bay will be required).

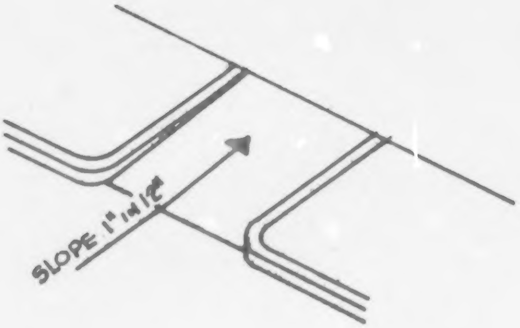
2.2.5 Substantially level, (1/8 inch per foot slope for drainage) suitable for wheeling and walking, and accessible to the building by a clear, level or ramped path of travel. (See Section2.3)

2.3 Walks

Public walks should be made to form a continuous surface uninterrupted by steps or abrupt changes in level. To be usable by the physically handicapped a walk must be:

• 2.3.1 48 inches wide minimum. (60 inches is preferable).

• 2.3.2 Level where possible, but with a maximum gradient of 5%. Where gradient exceeds 3%, level rest areas must be incorporated at 60 foot (maximum) intervals. For gradients over 5%, see "Ramps". (NOTE: Walks which slope to the side are difficult to manuever in a wheelchair).



• 2.3.3 Constructed of firm, fixed non-slip materials with a minimum of joints.

2.3.4 Free of gratings, manholes and similar impediments. (If a grating cannot be avoided, it must contain no openings greater than 3/4 inch in any dimension).

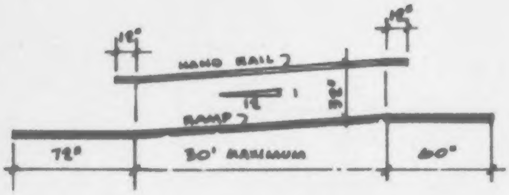
• 2.3.5 Brought gradually (at 8% maximum pitch) to a common level with other walks, driveways, streets, and parking lots. (NOTE: This does not require the elimination of curbs, which should mark boundaries between safe and unsafe areas, particularly for the blind. See illustration for preferred design of "curb cuts".)

• 2.3.6 Provided with a level platform extending at least 5 feet beyond a door swing and at least one foot beyond each side of the door opening.

2.3.7 At the same level as the surface of the adjacent ground. Handrails 32 inches high should be provided where the grade drops abruptly within three feet of the walk.

2.3.8 Snow melting systems should be considered in cold climates.

2.4 Ramps



Where a ramp with a gradient of 5 to 8 percent is necessary, it must be:

2.4.1 The same width as the walk or corridor it serves (48 inches minimum).

* 2.4.2 Kept to a maximum gradient of 8.33 percent, or one foot rise in 12 feet of run.

* 2.4.3 Constructed of firm, fixed, non-slip materials. (Concrete surfaces should be broom finished.)

2.4.4 Free of gratings or other openings if possible. (If a grating cannot be avoided, it must contain no openings greater than 3/4 inch in any dimension).

* 2.4.5 Provided with a level platform at least 60 inches at the top and a straight, level clearance of at least 72 inches at the bottom of the ramp.

* 2.4.6 Provided with level landings - a minimum of 60 inches in length - at 30 foot maximum intervals and at all changes in direction, intersections with other ramps, paths, doors, etc. (See section 3.2.3 for doors opening onto ramps).

* 2.4.7 Provided with handrails 32 inches in height on at least one side and preferably both sides. The rails must be smooth, at least 1-1/2 inches clear of walls, and extend at least 12 inches beyond the top and bottom of the ramp. (NOTE: Where a handrail of a different height is required by code, a second rail should be installed at 32 inches. Where ramp will be used frequently by children, provide an additional rail at 16 to 18 inches, depending on the age group being served).

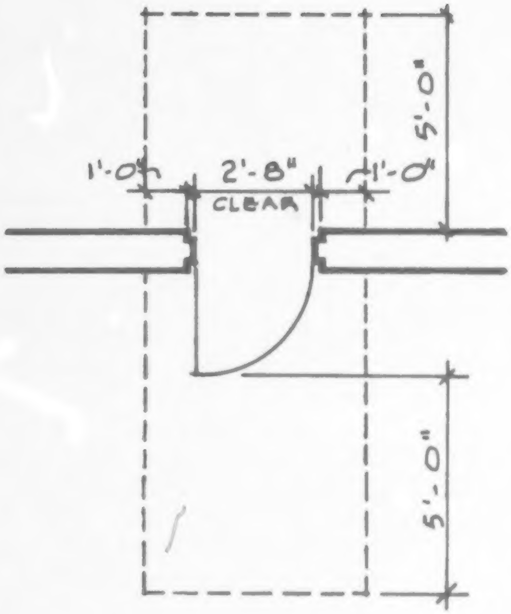
2.4.8 Provided with guard rails 32 inches high and curbs 2 inches high (or with a 32 inch high wall) where there is a drop in grade from either side of the ramp.

2.4.9 Well illuminated.

2.4.10 It is suggested that ramps be provided with protective canopies or automatic snow melting systems where they are exposed to the weather and where freezing weather is expected.

2.5 Stairs See Section 3.5

CHAPTER 3 – BUILDINGS



3.1 Entrances

* At least one primary entrance to a building (not the service entrance) must be usable by persons in wheelchairs. All major entrances should be usable by the physically handicapped, since they also serve as required emergency exits.

* 3.1.1 In a multi-story building, at least one wheelchair entrance must be located on a level accessible to the building elevators.

3.1.2 A level approach platform is required at each entrance. It must extend at least 5 feet from the door swing and at least one foot beyond each side of the door opening. (See illustration)

3.1.3 Turnstiles: When turnstiles are required for access, consideration must be given to an alternate means of access for wheelchairs which does not require disruption of traffic, stoppage of work, and assistance from other people. This might be done with a swinging gate or removable railing which can be electrically released by a nearby cashier.

3.1.4 Where revolving entrance doors are used, additional side-hung doors which conform to Section 3.2, must be provided adjacent to the revolving doors.

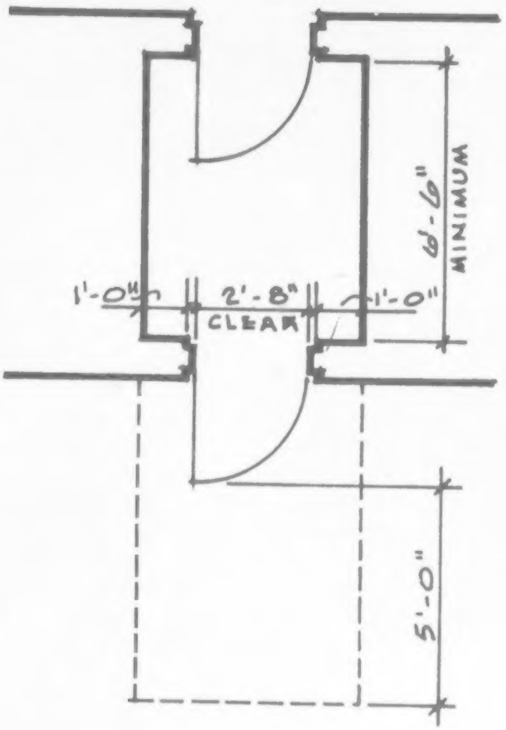
3.1.5 Vestibules must conform to Section 3.2.4.

3.1.6 All usable entrances should be identified by the International Symbol of Access (See Section 3.11.1).

3.2 Doors (Exterior and Interior)

Automatic doors are desirable if they otherwise conform to this section. Sliding doors are acceptable if they meet the requirements below and if careful attention is paid to hardware. Recessed handles should be avoided.

* 3.2.1 Doors must have a clear opening of at least 32 inches when open and must be operable by a single effort requiring no



more than eight pounds pressure to open. (Five pounds is preferable). (NOTE: A 32 inch clear opening requires a door wider than 32 inches).

• 3.2.2 Two-leaf doors are not acceptable unless they open with a single effort, or unless one of the leaves provides a minimum clear opening of 32 inches.

• 3.2.3 The floor on both the inside and outside of a doorway must be level for a distance of at least five feet from the door swing. The floor must extend at least one foot beyond each side of the door.

3.2.4 A series of two doors (for example, a vestibule with outer and inner doors) must be separated by a minimum of 6 feet 6 inches so that a wheelchair cannot be trapped between the two doors.

• 3.2.5 Thresholds must be flush with the floor if possible. Where necessary, they must be beveled gradually from both sides at an 8% maximum slope.

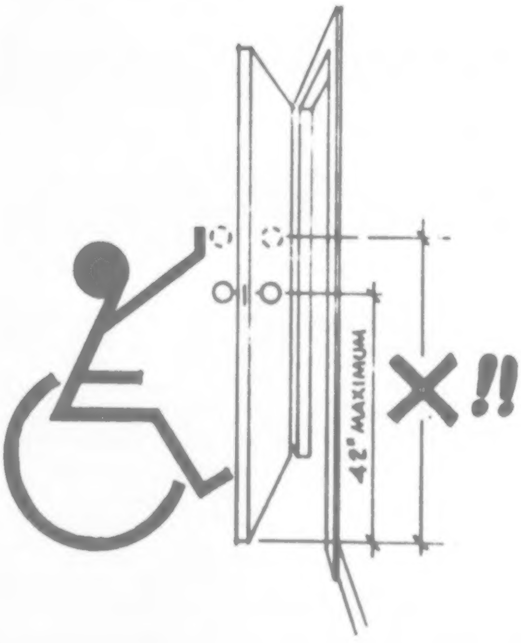
• 3.2.6 Kickplates at least 16 inches high are recommended where wheelchair traffic is prevalent.

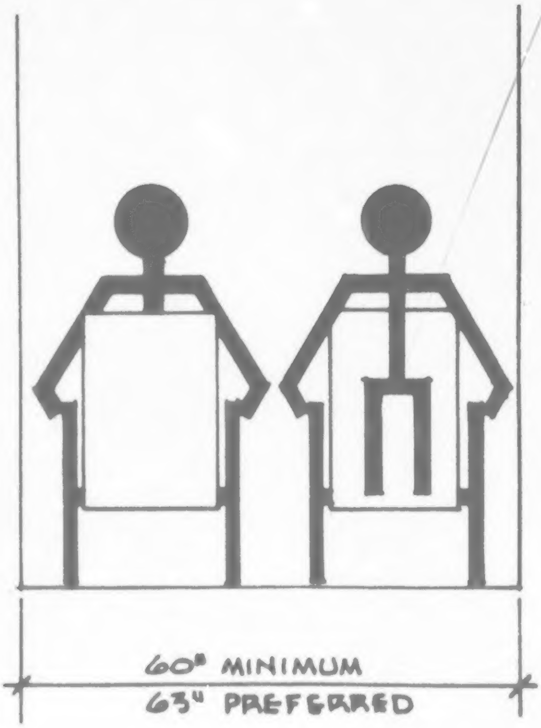
• 3.2.7 Door closing devices must be selected and installed to allow use of doors by the handicapped. Maximum pressure on a door to resist the closer must not exceed 8 lbs. (5 lbs. is preferable). The closing mechanism should provide a 4 to 6 second time delay.

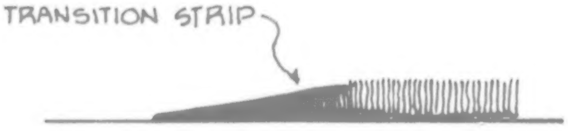
3.2.8 Handles should be mounted 42 inches or less above the floor. (Panic devices should be 32 inches above the floor). In danger areas handles and panic bars should be knurled to serve as warning to the blind. See Section 3.11.3.

3.2.9 Vision panels are desirable in all swinging doors. When provided, the glass must be the safety type and the bottom of the glass should be no more than 36 inches above the floor. (NOTE: A narrow vertical view panel 6 to 8 inches wide at the latch side of the door is effective).

3.2.10 Door identification - See Section 3.11.







3.3 Corridors, Public Spaces and Work Areas

All public spaces in a building should be designed to accommodate the physically handicapped.

3.3.1 Corridor width must be a minimum of 60 inches for wheelchair maneuverability. (63 inches is preferred).

3.3.2 Doors opening into corridors from habitable areas should be recessed, so as not to reduce the corridor width. (Recesses should conform to Section 3.2.3).

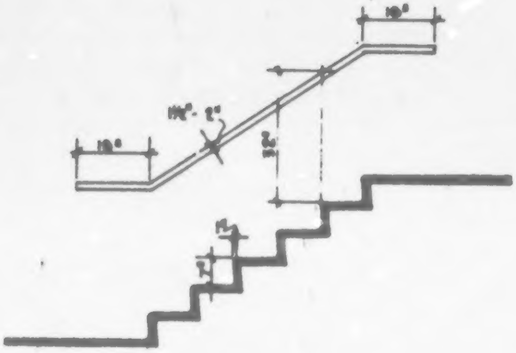
3.3.3 Corridors should have a minimum clear height of 84 inches, free of hanging or protruding signs, lights, or other fixtures.

• 3.3.4 Floors must be on a common level throughout a given story, or connected by properly designed ramps.

• 3.3.5 Floors must be constructed of non-slip materials with a continuous uninterrupted surface.

- 3.3.5.1 Avoid access panels, grates, etc. in floors. (See Section 2.4.4)
- 3.3.5.2 Carpeting in public or general office areas should be be heavy duty type with a tight weave and low pile, preferably installed without padding.
- 3.3.5.3 Floors of primary circulation paths should have a hard surface (such as vinyl asbestos tile) which permits easy movement of wheelchairs. Travel distance over carpeting required to reach such a path should not exceed 50 feet.
  (NOTE: This applies particularly to open-space office areas, where access paths through carpeted areas may be required).
- 3.3.5.4 Metal or resilient transition strips are required where carpet adjoins another flooring material and is not flush with that material. See threshold requirements, Section 3.2.5.

3.4 Ramps See Section 2.4.



3.5 Stairs

Although stairs are a barrier to many of the physically handicapped, they can be used by those with certain disabilities and by the aged if they conform to the following provisions:

3.5.1 Width should be a minimum of 42 inches between handrails.

* 3.5.2 Risers should be no more than 7 inches high.

* 3.5.3 Nosings must not project beyond the face of the riser. Splayed risers are preferred, with non-projecting nosings. (See Illustration).

3.5.4 Treads should be of a non-slip material.

3.5.5 Approaches and landings should be level, and differentiated from the stairs by contrasting color or texture.
(NOTE: Open stairs should be provided with a means of warning the blind of their existence, such as slightly raised abrasive strips at the approach).

* 3.5.6 Handrails at 32 inches high (measured vertically from stair nosing) are required on both sides of the stair. Rails should be circular or oval in section, 1-1/2 inches to 2 inches in diameter and have a non-slip finish. At least one handrail must extend at least 18 inches beyond both the top and the bottom step.
(NOTE: For rails on stairs used primarily by children see 2.4.7).

3.5.7 Stairs must be well illuminated.

3.6 Elevators

In multi-story buildings, elevators are necessary for the mobility of the physically handicapped. They must be designed to accommodate wheelchair traffic as follows:

* 3.6.1 Elevators must be accessible at the level of a major building entrance which is usable by the handicapped. These elevators must give access to all building levels normally used by the public or by physically handicapped persons.

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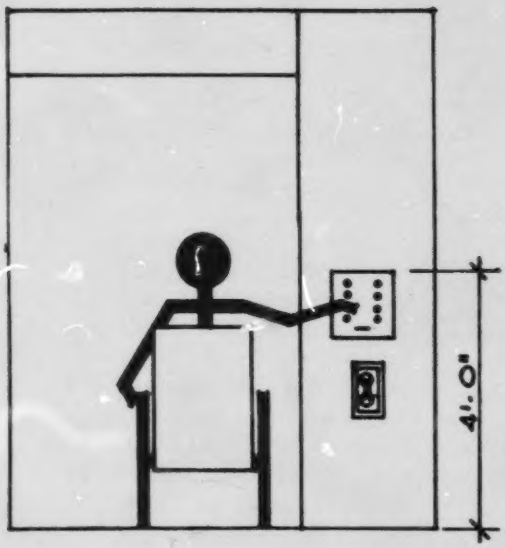


3.6.2 Call buttons should be centered at 40 inches above the floor. Lobby indicators should signal elevators going up with a higher pitch sound and elevators going down with a lower pitch sound.

• 3.6.3 Cab size must allow for the turning of a wheelchair. It should measure at least 60 x 60 inches square or 63 inches by 56 inches.

• 3.6.4 Door clear opening width must be 32 inches minimum.

3.6.5 A handrail at 32 inches from the floor should be provided on at least one side of the cab and preferably on the back and two sides.

3.6.6 Operation must be automatic, the cab stopping precisely at floor levels with a self-leveling feature.

3.6.7 Doors shall be fitted with a sensitive safety edge.

3.6.8 All essential controls must be within 48 inches from the cab floor. They should be usable by the blind, featuring raised numerals and "pop out" action on floor selection buttons.

3.6.9 An emergency telephone (with no dial) should be mounted low enough (48 inches maximum) for use by children and the handicapped.

3.6.10 Emergency use: Elevators cannot be considered as exits in an emergency. A definite plan is required to assist the physically handicapped, particularly those in wheelchairs. This might include alternate routes of exit, areas of refuge within the building, and the assistance of designated persons.

3.7 Toilet Facilities

At least one toilet room for each sex on each floor shall be accessible to and usable by the physically handicapped. Such toilet rooms must meet the following requirements:

• 3.7.1 Entrance vestibules, doors, and vision screens must allow sufficient clearance for wheelchair passage. Entrance doors must provide 32 inches clear opening minimum. (34 inches is preferable).

Vestibule doors must be at least 6 feet 6 inches apart. (See Section 3.2.4).

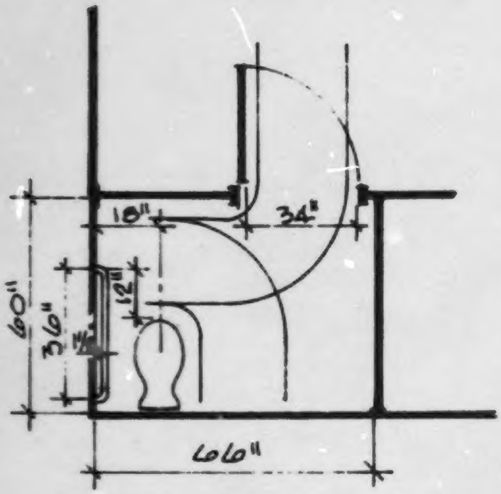
* 3.7.2 The floor of the toilet room shall be at the same level as the corridor floor outside. Thresholds must conform to Section 3.2.5.

3.7.3 The room must contain a clear floor area of at least 60 x 60 inches to permit the turning of a wheelchair.

3.7.4 Side transfer toilet compartment: (See Illustration). At least one stall in each toilet room serving the handicapped should have:

3.7.4.1 A minimum width of 66 inches and a depth of at least 60 inches.

3.7.4.2 A 34 inch wide clear opening at the front of the stall with an outswinging door. (An opaque curtain may be used.)



3.7.4.3 A wall-mounted grab bar on one side, 1-1/2 inches clear of the wall, and mounted securely 33 inches above the floor. (NOTE: In facilities containing multiple sets of toilet rooms, the location of grab bars and water closets should be alternated between right and left sides of compartments).

3.7.4.4 One water closet with seat 20 inches above the finished floor, centerline located 18 inches from the side wall on which the grab bar is located. A wall-mounted model is preferred; if a floor-mounted model must be used, the under-structure must not interfere with the close approach of a wheelchair. (NOTE: There is substantial controversy over the advisability of mounting water closets for the handicapped higher than normal - i.e., 20 inches above the floor).

3.7.5 As an alternative to the preferred side-transfer compartment described above, the compartment may have:

- 3.7.5.1 A minimum width of 36 inches (42 inches is preferred) and a depth of at least 56 (and preferably 60) inches.

- 3.7.5.2 A clear opening at the front of the stall at least 32 inches wide (34 inches is preferable) with a door that swings out. (An opaque curtain may be used in place of a door).

- 3.7.5.3 Wall-mounted grab bars on each side, 1-1/2 inches in diameter, 52 inches long, 1-1/2 inches clear of the wall, and mounted securely 33 inches above the floor.

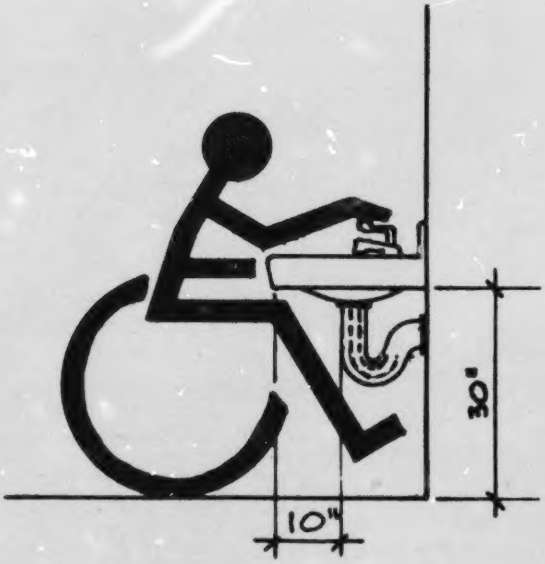
- 3.7.5.4 A water closet with seat 20 inches above the floor and centered on the rear wall of the compartment. A wall-mounted model is preferred; if a floor-mounted model must be used, the understructure must not interfere with the close approach of a wheelchair.

  (NOTE: This alternate method conforms with the ANSI, A117.1 - 1961 Standard but does not provide adequately for the wheelchair as does the side transfer stall.)

3.7.6 Lavatories: At least one lavatory in each toilet room serving the physically handicapped shall be:

- 3.7.6.1 Wall-mounted to provide a 30 inch clear space below the bottom of the fixture for a depth of 10 inches from the face of the fixture.

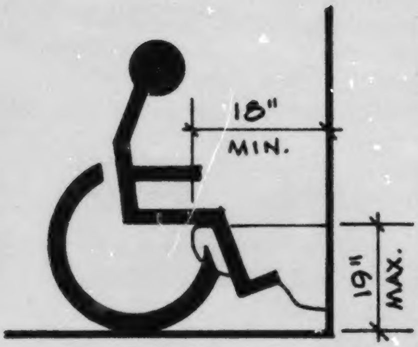
3.7.6.2 Easily operated with no self-closing faucets. Wrist blade or



single lever-type handles not requiring hand grip should be used.

* 3.7.6.3 Insulated or protected so that wheelchair occupants without leg sensation cannot be burned by hot water pipes or drains.

* 3.7.7 At least one urinal in men's toilet rooms shall be wall-mounted with the rim 19 inches above the floor and projecting at least 18 inches from the wall. Floor mounted urinals are acceptable if they are at the same level as the main floor of the toilet room.



* 3.7.8 Mirrors and shelves shall be mounted above wheelchair type lavatories at as low a height as possible, but not to exceed 40 inches from the bottom of the mirror to the floor. As an alternate method the mirror may be tilted forward slightly to permit viewing from a wheelchair.

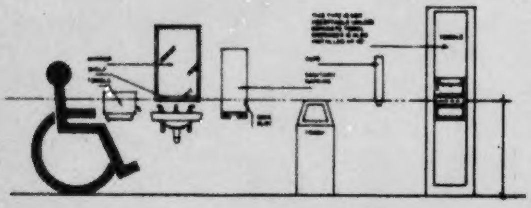
* 3.7.9 Towel dispensers, towel racks, other dispensers and disposal units must be mounted no higher than 40 inches above the floor. They must dispense multifold, interlocking type paper towels. (NOTE: Towel dispensers should be located within easy reach from the lavatory without moving the wheelchair)

3.7.10 Shower stalls, where provided for the physically handicapped, should be square, measure at least 36 inches on each side with a 36 inch minimum door opening, a non-slip floor surface, and no curb. Stalls should be equipped with the following:

3.7.10.1 Two folding seats (right and left sides) mounted 19 inches high. (NOTE: Where two or more stalls are provided, one seat per stall; one righthand, the other lefthand, is sufficient.)

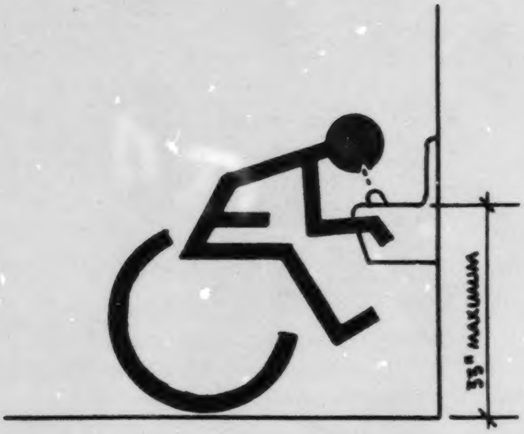
3.7.10.2 A grab bar at 33 inches high, securely attached to the wall opposite the seat and extending around part of the back wall.

3.7.10.3 Controls and soap trays



mounted a maximum of 42 inches above the floor. Controls should be lever or wrist type, operable from outside as well as inside the stall.

3.7.10.4 A hand held shower head fixture with on/off control as an integral part of the hand held unit. This unit must be mounted on flexible metal tubing not less than 60 inches in length.



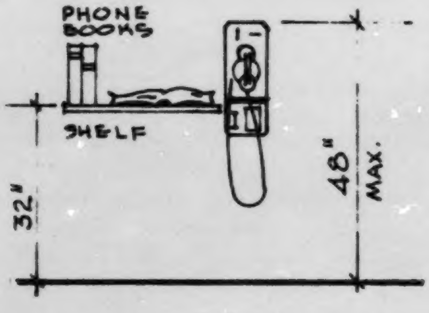
3.8 Drinking Fountains

At least one drinking fountain designed for use by the physically handicapped shall be provided at an accessible location on each floor.

* 3.8.1 The fountain must be hand lever operated or hand and foot operated with up-front water jet and controls.

* 3.8.2 A wall-mounted model with a 12 inch projecting basin is preferred. The rim of the basin should be no more than 33 inches from the floor. This type can serve both the able-bodied and the disabled equally well. Fully recessed models are unacceptable.

3.8.3 A 60 inch wide alcove is a preferable location for a drinking fountain.



3.9 Public Telephones

In any "bank", at least one public telephone should be accessible to wheelchair users, (Standard telephone booths are not usable by most physically handicapped persons).

3.9.1 The local telephone company should be consulted for information on models which can be installed outside booths.

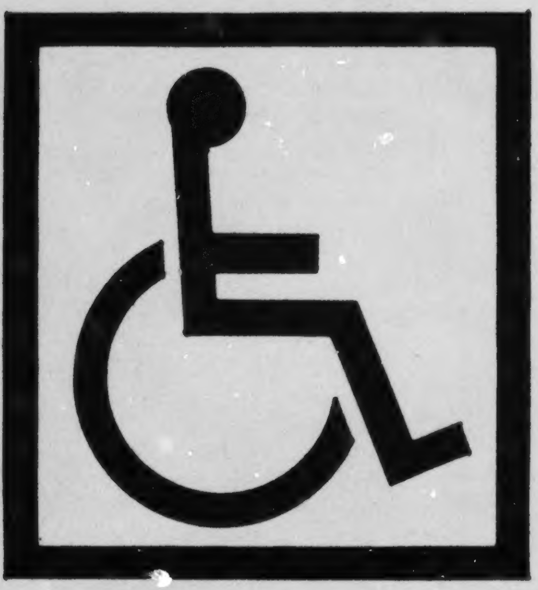
* 3.9.2 The dial, handset and coin slot must be located no higher than 48 inches above the floor. A push-button type dial is preferred. The cord should be a mini-

mum of 36 inches long.

• 3.9.3 At least one telephone in any "bank" should be identified and equipped with an amplifier for use by those with hearing disabilities. (NOTE: These telephones can be used by everyone).

3.10 Controls

All essential or frequently used controls shall be located within reach of wheelchair users. (NOTE: There is some controversy over the necessity of having fire alarms, extinguishers, and electrical outlets specially located for use by the handicapped. However, ANSI A117.1 requires that controls, including fire alarms, be placed within reach of wheelchair users.)



• 3.10.1 Fire alarm stations, electrical switches; thermostats; and door, window and drapery controls shall be placed no higher than 48 inches from the floor.

3.10.2 Electrical outlets should be located no less than 18 inches above the floor. (In areas designed specifically for the handicapped, outlets should be located 24 inches above the floor).

3.10.3 No more than 8 pounds (and preferably 5 pounds) of pressure or tension should be required to operate any switch, lever, or other essential control.

3.11 Identification and Warning

3.11.1 Symbol of Access
Buildings which are fully accessible to wheelchair users and other persons with limited mobility should display the International Symbol of Access at entrances to buildings, parking lots, toilet facilities, etc.

• 3.11.2 Room Identification for the Blind
A plaque bearing raised or notched letters or numbers should be placed on the corridor wall on the handle

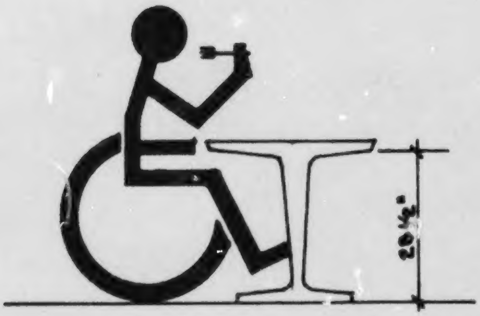
side of a doorway approximately 60 inches above the floor.

• 3.11.3 Doors leading to dangerous areas not intended for normal public use, such as mechanical equipment rooms, loading platforms, and fire escapes, should be identified by the use of knurled handles or knobs. (NOTE: "Knurling tape" may be applied to standard hardware). Similarly, floors at the head of open stairs, ramps or curbs shall be provided with abrasive strips or textured flooring material.

• 3.11.4 ANSI A 117.1 requires that warning signals shall be both visible and audible for the benefit of persons with either hearing or visual disabilities.

• 3.11.5 Hazardous areas of a temporary nature, such as construction sites, open manholes, access panels, elevator shafts, etc. must be separated on all open sides from normal pedestrian traffic by suitable barricades placed at least 96 inches from the hazard, equipped with both visible and audible warning devices.

3.12 Special Use Spaces



The following types of spaces require special attention in order to be usable by the physically handicapped:

3.12.1 Dining Areas must be directly accessible (i.e., not through kitchens) to wheelchair users.

- 3.12.1.1 Serving line width between tray slide and control railing should be at least 36 inches.
- 3.12.1.2 Outside rail height of tray slide should be no greater than 34 inches.
- 3.12.1.3 Access aisles between tables should be at least 66 inches wide.
- 3.12.1.4 There should be a clearance of at least 28 1/2

inches between the floor and the undersurface of the table top, unobstructed by fascias, skirts or bracing. (NOTE: It is not desirable to design or designate a limited number of tables in a dining room for use by the handicapped, thus segregating them from the able-bodied population).

3.12.2 Spectator Spaces (auditoria, lecture halls) should have areas set aside for the physically handicapped. (Movable seats may be provided for these areas when not used by wheelchairs).

3.12.2.1 Handicapped stations should be:
a. level
b. large enough to accommodate wheelchairs
c. out of traffic ways
d. with good visibility and acoustics.

3.12.2.2 Handicapped stations should be easily accessible to exits with a level or ramped path of travel.

3.12.3 Laboratories should provide work stations for handicapped persons as determined by the program.

3.12.3.1 Each handicapped station should have a low work bench with no apron and a clear height of 28 1/2 inches to the underside of the bench. The knee space should be at least 28 inches wide.

3.12.3.2 Aisles between stations or benches must have a clear width of at least 48 inches.

3.12.4 Libraries must provide study carrels and tables which are accessible to wheelchair users.

3.12.4.1 All tables should have a clear height of at least 28 1/2 inches to the underside of the work surface.

3.12.4.2 Aisles between stacks should be wide enough to allow wheelchair passage.

3.12.5 Audio-Visual Control Rooms should have level or ramped access for wheelchairs. Aisles between equipment should be at least 36 inches wide.

3.12.6 Bedrooms in dormitories and similar occupancies should be designed to accommodate the physically handicapped in any facility.

3.12.6.1 Rooms serving the handicapped must be designed to allow furniture placement with at least 52 inches between major elements (Clearance between the bed and a wall surface may be 38 inches).

3.12.6.2 The clothing storage facility must be usable by individuals in wheelchairs. Hanging rods should be mounted no more than 48 inches above the floor. Partial entrance of wheelchairs into a closet is mandatory.

3.12.6.3 The matress top should be approximately 22 inches above the floor.

3.12.6.4 Windows should be easily operated from a wheelchair

3.12.6.5 Adequate ventilation must be provided, especially in bedrooms where electric wheelchairs may be recharged.

APPENDIX: WHEELCHAIR CRITERIA

The wheelchair is the basic vehicle for the non-ambulatory person. Its specifications establish the fundamental design requirements for making facilities accessible to and usable by the handicapped. Most crutch or brace-supported semi-ambulatory persons are able to maneuver within the limits prescribed for wheelchairs.

1. Wheelchair Dimensions
   The most commonly used wheelchair is the collapsible model with tubular metal frame and plastic upholstery on seat and back. The standard model of all manufacturers falls within the following ranges of dimensions:
   a. Length: 33.5 to 48 inches. Mode: 42 inches. (NOTE: does not include shoes or feet - add 6 inches).
   b. Width open: 18.5 to 32.5 inches. Mode: 26 inches (NOTE: does not include hands and arms, which extend beyond wheels when pushing).
   c. Width collapsed: 9 to 14.5 inches. Mode: 11 inches.
   d. Seat height above floor, 19.5 inches (standard).
   e. Arm height: 19.5 to 33.5 inches. Mode: 29.5 inches.
   f. Overall height: 33 to 53.5 inches. Mode: 37 inches.
2. Wheelchair Operation (based on modal dimensions listed above).
   a. Turning space required: 60 x 60 inches, or 63 x 56 inches (preferred), or 54 inch wide corridor with two open ends.
   b. Minimum aisle width for passing of two wheelchairs: 60 inches. (63 inches preferred).
3. Average Reach of an Adult Wheelchair Occupant
   a. Unilateral vertical reach: 60 inches. Range: 54 to 78 inches.
   b. Horizontal reach, table height: 30.8 inches. Range 28.5 to 33.5 inches.
   c. Bilateral horizontal reach: 64.5 inches Range: 54 to 71 inches.
   d. Diagonal reach to object on wall: 48 inches above floor.
   It should be noted that the above are averages for an adult using a standard wheelchair. The very small adult, the child, the unusually weak individual, the user of a wheelchair with detachable arms or with a leg extended forward, these would fall outside the above ranges and must be considered.

Appendix F

Laws Relating To Activities Of The Architectural And Transportation Barriers Compliance Board

Public Law 90-480
90th Congress, S. 222
August 12, 1968

An Act

To insure that certain buildings financed with Federal funds are so designed and constructed as to be accessible to the physically handicapped.

Public buildings. Accessibility to physically handicapped.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, as used in this Act, the term "building" means any building or facility (other than (A) a privately owned residential structure and (B) any building or facility on a military installation designed and constructed primarily for use by able bodied military personnel) the intended use for which either will require that such building or facility be accessible to the public, or may result in the employment or residence therein of physically handicapped persons, which building or facility is—

82 STAT. 718
82 STAT. 719

(1) to be constructed or altered by or on behalf of the United States;

(2) to be leased in whole or in part by the United States after the date of enactment of this Act after construction or alteration in accordance with plans and specifications of the United States; or

(3) to be financed in whole or in part by a grant or a loan made by the United States after the date of enactment of this Act if such building or facility is subject to standards for design, construction, or alteration issued under authority of the law authorizing such grant or loan.

Standards.

SEC. 2. The Administrator of General Services, in consultation with the Secretary of Health, Education, and Welfare, is authorized to prescribe such standards for the design, construction, and alteration of buildings (other than residential structures subject to this Act and buildings, structures, and facilities of the Department of Defense subject to this Act) as may be necessary to insure that physically handicapped persons will have ready access to, and use of, such buildings.

SEC. 3. The Secretary of Housing and Urban Development, in consultation with the Secretary of Health, Education, and Welfare, is authorized to prescribe such standards for the design, construction, and alteration of buildings which are residential structures subject to this Act as may be necessary to insure that physically handicapped persons will have ready access to, and use of, such buildings.

SEC. 4. The Secretary of Defense, in consultation with the Secretary of Health, Education, and Welfare, is authorized to prescribe such standards for the design, construction, and alteration of buildings, structures, and facilities of the Department of Defense subject to this Act as may be necessary to insure that physically handicapped persons will have ready access to, and use of, such buildings.

Applicability.

SEC. 5. Every building designed, constructed, or altered after the effective date of a standard issued under this Act which is applicable to such building, shall be designed, constructed, or altered in accordance with such standard.

SEC. 6. The Administrator of General Services, with respect to standards issued under section 2 of this Act, and the Secretary of Housing and Urban Development, with respect to standards issued under section 3 of this Act, and the Secretary of Defense with respect to standards issued under section 4 of this Act, is authorized—

Waiver.

(1) to modify or waive any such standard, on a case-by-case basis, upon application made by the head of the department, agency, or instrumentality of the United States concerned, and

upon a determination by the Administrator or Secretary, as the case may be, that such modification or waiver is clearly necessary, and

Surveys and investigations.

(2) to conduct such surveys and investigations as he deems necessary to insure compliance with such standards.

Approved August 12, 1968.

HOUSE REPORTS: No. 1532 accompanying H. R. 6589 (Comm. on Public Works) and No. 1787 (Comm. of Conference).
SENATE REPORT No. 538 (Comm. on Public Works).
CONGRESSIONAL RECORD:
    Vol. 113 (1967): Aug. 25, considered and passed Senate.
    Vol. 114 (1968): June 17, considered and passed House, amended, in lieu of H. R. 6589.
        July 26, House agreed to conference report.
        July 29, Senate agreed to conference report.

Public Law 91-205
91st Congress, H. R. 14464
March 5, 1970

An Act

To amend the Act of August 12, 1968, to insure that certain facilities constructed under authority of Federal law are designed and constructed to be accessible to the physically handicapped.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the first section of the Act entitled "An Act to insure that certain buildings financed with Federal funds are so designed and constructed as to be accessible to the physically handicapped", approved August 12, 1968 (42 U.S.C. 4151), is amended—

Public buildings.
Accessibility to physically handicapped.

82 Stat. 718.

(1) by striking out "or" at the end of paragraph (2);

(2) by striking out the period at the end of paragraph (3) and inserting in lieu thereof: "; or"; and

(3) by adding at the end thereof the following:

"(4) to be constructed under authority of the National Capital Transportation Act of 1960, the National Capital Transportation Act of 1965, or title III of the Washington Metropolitan Area Transit Regulation Compact."

83 Stat. 322.
79 Stat. 663.
40 USC 681 note.
80 Stat. 1324.
D.C. Code 1-1431 note.

Approved March 5, 1970.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 91-750 (Comm. on Public Works).
SENATE REPORT: No. 91-658 (Comm. on Public Works).
CONGRESSIONAL RECORD:
Vol. 115 (1969): Dec. 15, considered and passed House.
Vol. 116 (1970): Feb. 10, considered and passed Senate, amended.
Feb. 19, House concurred in Senate amendments.

ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD

Establishment; membership.

83 Stat. 864.
5 USC 5315 note.

Sec. 502. (a) There is established within the Federal Government the Architectural and Transportation Barriers Compliance Board (hereinafter referred to as the "Board") which shall be composed of the heads of each of the following departments or agencies (or their designees whose positions are Executive Level IV or higher):

(1) Department of Health, Education, and Welfare;
(2) Department of Transportation;
(3) Department of Housing and Urban Development;
(4) Department of Labor;
(5) Department of the Interior;
(6) General Services Administration;
(7) United States Postal Service; and
(8) Veterans' Administration.

82 Stat. 718;
84 Stat. 49.
42 USC 4151.

International Accessibility Symbol, promotion.

Reports to President and Congress.

(b) It shall be the function of the Board to: (1) insure compliance with the standards prescribed by the General Services Administration. the Department of Defense, and the Department of Housing and Urban Development pursuant to the Architectural Barriers Act of 1968 (Public Law 90-480), as amended by the Act of March 5, 1970 (Public Law 91-205); (2) investigate and examine alternative approaches to the architectural, transportation, and attitudinal barriers confronting handicapped individuals, particularly with respect to public buildings and monuments, parks and parklands, public transportation (including air, water, and surface transportation whether interstate, foreign, intrastate, or local), and residential and institutional housing; (3) determine what measures are being taken by Federal, State, and local governments and by other public or nonprofit agencies to eliminate the barriers described in clause (2) of this subsection; (4) promote the use of the International Accessibility Symbol in all public facilities that are in compliance with the standards prescribed by the Administrator of the General Services Administration. the Secretary of Defense, and the Secretary of Housing and Urban Development pursuant to the Architectural Barriers Act of 1968; (5) make to the President and to Congress reports which shall describe in detail the results to its investigations under clauses (2) and (3) of this subsection; and (6) make to the President and to the Congress such recommendations for legislation and administration as it deems necessary or desirable to eliminate the barriers described in clause (2) of this subsection.

Transportation barriers.

(c) The Board shall also (1)(A) determine how and to what extent transportation barriers impede the mobility of handicapped individuals and aged handicapped individuals and consider ways in which travel expenses in connection with transportation to and from work for handicapped individuals can be met or subsidized when such individuals are unable to use mass transit systems or need special equipment in private transportation, and (B) consider the housing needs of handicapped individuals; (2) determine what measures are being taken, especially by public and other nonprofit agencies and groups having an interest in and a capacity to deal with such problems, (A) to eliminate barriers from public transportation systems (including vehicles used in such systems), and to prevent their incorporation in new or expanded transportation systems and (B) to make housing available and accessible to handicapped individuals or to meet sheltered housing needs; and (3) prepare plans and proposals for such further actions as may be necessary to the goals of adequate transportation and housing for handicapped individuals, including proposals for bringing together in a cooperative effort, agencies, organizations, and groups already working toward such goals or whose cooperation is essential to effective and comprehensive action.

(d) In carrying out its functions under this section, the Board shall conduct investigations, hold public hearings, and issue such orders as it deems necessary to insure compliance with the provisions of the Acts cited in subsection (b). The provisions of subchapter II of chapter 5, and chapter 7 of title 5, United States Code, shall apply to procedures under this section, and an order of compliance issued by the Board shall be a final order for purposes of judicial review.

5 USC 551, 701.

(e) The Board is authorized to appoint as many hearing examiners as are necessary for proceedings required to be conducted under this section. The provisions applicable to hearing examiners appointed under section 3105 of title 5, United States Code, shall apply to hearing examiners appointed under this subsection.

80 Stat. 415.

(f) The departments or agencies specified in subsection (a) of this section shall make available to the Board such technical, administrative, or other assistance as it may require to carry out its functions under this section, and the Board may appoint such other advisers, technical experts, and consultants as it deems necessary to assist it in carrying out its functions under this section. Special advisory and technical experts and consultants appointed pursuant to this subsection shall, while performing their functions under this section, be entitled to receive compensation at rates fixed by the Secretary, but not exceeding the daily pay rate, for a person employed as a GS-18 under section 5332 of title 45, United States Code, including traveltime, and while serving away from their homes or regular places of business they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of such title 5 for persons in the Government service employed intermittently.

Technical assistance.

5 USC 5332 note.

80 Stat. 499; 83 Stat. 190.

(g) The Board shall, at the end of each fiscal year, report its activities during the preceding fiscal year to the Congress. Such report shall include an assessment of the extent of compliance with the Acts cited in subsection (b) of this section, along with a description and analysis of investigations made and actions taken by the Board, and the reports and recommendations described in clauses (5) and (6) of subsection (b) of this section. The Board shall prepare two final reports of its activities under subsection (c). One such report shall be on its activities in the field of transportation barriers to handicapped individuals, and the other such report shall be on its activities in the field of the housing needs of handicapped individuals. The Board shall, prior to January 1, 1975, submit each such report, together with its recommendations, to the President and the Congress. The Board shall also prepare for such submission an interim report of its activities in each such field within 18 months after the date of enactment of this Act.

Report to Congress.

Report to the President and Congress.

(h) There are authorized to be appropriated for the purpose of carrying out the duties and functions of the Board under this section $1,000,000 each for the fiscal years ending June 30, 1974, and June 30, 1975.

Appropriation.

PUBLIC LAW 93-516
93rd CONGRESS, H.R. 17503
December 7, 1975

To extend the authorizations of appropriations in the Rehabilitation Act of 1973 for one year, to transfer the Rehabilitation Services Administration to the Office of the Secretary of Health, Education, and Welfare, to make certain technical and clarifying amendments, and for other purposes; to amend the Randolph-Sheppard Act for the blind, to strengthen the program authorized thereunder; and to provide for the convening of a White House Conference on Handicapped Individuals.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I–AMENDMENTS TO THE REHABILITATION ACT OF 1973

SHORT TITLE

Sec. 100. This title shall be known as the "Rehabilitation Act Amendments of 1974."

Sec. 111. MISCELLANEOUS AMENDMENTS

(k) Section 304 (e)(1) of such Act is amended by inserting after "(B)" the following: "with the concurrence of the Board established by section 502.".

(l) (1) Section 306 (b) of such Act is amended by inserting after "project" a comma and "or for a project which involves construction,".

(2) Section 306 (b)(4) of such Act is amended by inserting after "specifications" the following: "which have been approved by the Board established by section 502.".

(m) Section 405 (c) of such Act is amended by–

(1) striking out "the Handicapped" and inserting in lieu thereof "Handicapped Individuals"; and

(2) by adding at the end thereof the following new sentence: "In no event shall any functions under this section be further delegated to any persons with operational responsibilities for carrying out functions authorized under any other section of this Act or under any other provision of law designed to benefit handicapped individuals."

(n) (1) Section 502(a) of such Act is amended by redesignating clauses (6), (7), and (8) thereof as clauses (7), (8), and (9), respectively, and by inserting immediately after clause (5) the following new clause:

"(6) Department of Defense;".

(2) Section 502(a) of such Act is further amended by adding at the end thereof the following new sentence: "The Secretary of Health, Education, and Welfare shall be the Chairman of the Board, and the Board shall appoint, upon recommendation of the Secretary, a Consumer Advisory Panel, a majority of the members of which shall be handicapped individuals, to provide guidance, advice, and recommendations to the Board in carrying out its functions.".

(o) (1) Section 502 (d) of such Act is amended by striking out "section, the Board" in the first sentence and inserting in lieu thereof "Act, the Board shall, directly or through grants to or contracts with public or private nonprofit organizations, carry out its functions under subsections (b) and (c) of this section, and".

Ante, p. 1621.

Withholding or suspension of Federal funds.

(2) Section 502 (d) of such Act is further amended by adding at the end thereof the following new sentences: "Any such order affecting any Federal department, agency, or instrumentality of the United States shall be final and binding on such department, agency, or instrumentality. An order of compliance may include the withholding or suspension of Federal funds with respect to any building found

not to be in compliance with standards prescribed pursuant to the Acts cited in subsection (b) of this section.".

(p) Section 502 (e) of such Act is amended by adding before the first sentence the following new first sentence: "There shall be appointed by the Board an executive director and such other professional and clerical personnel as are necessary to carry out its functions under this Act.". **Additional Board appointees.**

(q) Section 502 (g) of such Act is amended by striking out in the penulatimate sentence "prior to January 1" and inserting in lieu thereof "not later than September 30". **Report to Congress.**

ADDENDUM

The Architectural and Transportation Barriers Compliance Board's scope and authority was substantially increased when Public Law 93-516 was passed on December 7, 1974. This law amended Public Law 93-112, which established the Board in 1973, to provide:

1) Addition of the Department of Defense as a board member;

2) Appointment of a Consumer Advisory Panel, a majority of the members of which shall be handicapped individuals, to provide guidance, advice, and recommendation to the Board in carrying out its functions.

3) Authority for the Board to issue final and binding orders for compliance on any Federal department, agency, or instrumentality of the United States. An order of compliance may include the withholding or suspension of Federal funds with respect to any building found not to be in compliance with accessibility standards;

4) Appointment of an executive director and such other professional and clerical personnel as are necessary to carry out the Board's functions.

October 17, 1975

Appendix G

Part I

Overview Of Concept And Planned Approach To Manpower Measurement In OHD

Part II

Analysis Of 7th, 6th, 5th, and 4th Order of A&TBCB

Part I

OVERVIEW OF CONCEPT AND PLANNED APPROACH TO MANPOWER MEASUREMENT IN OHD

The manpower measurement system being developed in OHD is heavily based on the system presented by Dr. Marvin E. Mundel in his book *Measuring and Enhancing the Productivity of Service and Government Organizations.* A copy of this book should be available on a loan basis from the Regional Planning Office or the Program Office Headquarters person designated as liaison on manpower measurement. The Management Analysis Staff, OAM can arrange to obtain additional copies if needed.

The development of a manpower measurement system in OHD was stimulated in part by insistence from OMB and the Department that future requests for positions in the budget must be based on a complete and much more reliable analysis than has been contained in past justifications. This analysis must account for workload not only for the additional positions requested but also for all positions in the current ceiling, and is therefore referred to as a "zero-based" analysis.

The system was also stimulated in part by the Assistant Secretary's and Program Directors' needs for a more reliable way of predicting manpower requirements for OPS objectives and for allocating manpower among and within the various programs and functions of OHD.

A very much oversimplified statement of the overall concept is as follows: We first develop a complete and non-overlapping list of all the functions and activities or tasks needed to carry out the mission of any program. We then, through one of several means, determine from past experience the average amount of time generally required to perform each of these tasks or activities *each time* they get performed. If the list is constructed properly, the average times or "standard times" should be *relatively* stable so that detailed log-keeping would not be necessary on a continuing basis. Also, if the list is properly constructed, any time there is a requirement for some large new effort such as an OPS objective, new legislative mandate or increased appropriation, it should be possible to break that effort down into component activities which correspond to those on our list. These activities should also be such that it would be reasonably easy, from the overall effort to be accomplished, to see how many times or how often each task or activity would need to be performed. From there it should be possible to predict the total person-hours, days, weeks, months or years required to perform the initiative, by multiplying the standard time of each component activity by the number of times it must be performed, and adding all the products together. This is an oversimplified description of the overall system, but it is reasonably accurate as a start.

Obviously, for the list of tasks to lend itself to the process described above, it must be developed in a certain way with certain criteria for how we break down and describe the tasks involved in each function of a program's mission. In order to remind ourselves that this is no simple, ordinary list of tasks or functions, we refer to it as a "Work Unit Structure." Similarly, we do not refer to "tasks" or "functions," but to "Work Units."

Some of the most important criteria for identifying and defining work units and for developing a work unit structure are as follows:

1. Work units are not stated in terms of simple *activity* but in terms of *accomplishment*. Ultimately the standard time associated with a work unit should cover all of the activities required to produce a certain complete output defined by the work unit. The major reason why it is so critical to insist on this particular approach to defining work units is the fact that the initiatives (whether OPS or legislative) for which we may wish to predict manpower requirements, are almost always laid on us in terms of some goal to be accomplished. Only by defining our work units in terms of little pieces of "accomplishment," will we be in a position to estimate how many of a particular work unit are likely to be required to achieve a broad objective. In other words, we would have no way of knowing how many additional meetings or telephone calls (activity) are required to administer an

additional $2 million dollars in a given program, but we should be able to give a reasonable estimate of the number of new grants (outputs) which could be awarded with that amount of money in a given program.

2. The work units should be sufficiently small in size, scope and standard time, for us to conceptualize and correspond to the typical kinds of small steps which are generally broken out in planning some larger initiative such as an OPS objective or the implementation of some new legislation. Without this characteristic, we could never apply our standard times to the planning tasks we normally set for ourselves in the real world.

3. The most detailed work units, stated in terms of little pieces of accomplishment, must "feed in" very rigorously and plainly to the major goals and mission areas mandated for our programs. To assure that every work unit relates clearly to some accepted portion of a program's mission, we use a somewhat strict technique in developing work units whereby we first state all the broadest independent goals or outputs contained in the mission of each program. Then we break these broad statements down into smaller pieces, all of which must be accomplished in order to achieve the larger goal. These smaller pieces are each broken down in turn, still stating these more detailed work units in terms of small pieces of accomplishment, and the process is repeated as often as necessary in order to achieve a useful level of detail. These successive breakouts give rise to the terminology you will hear regarding "orders" or "levels" of work units. Experience has shown that the process must normally be repeated about four or five times. Arbitrary numerical levels have been assigned with this in mind to permit a standard approach to these "levels" so that when you hear of an "Eighth order work unit," you know it is the broadest statement of a program's mission goals or outputs regardless of the program–whereas "fourth order work units" would be very detailed small pieces of accomplishment, all feeding successively into 5th, 6th, 7th, and finally the 8th order work units.

4. At some level in the work unit structure, but usually arbitrarily pegged as the "5th order" work units, the work units must be capable of being counted–even if there is only one per year. Without this, we would not be able to conceptualize a *number of times* that a particular work unit would have to be performed to achieve a given larger initiative. Without this, we would have nothing to multiply the standard time by to arrive at projected manpower requirements. In other words, the standard time associated with a 5th order work unit is time required to achieve that particular result *each* time it is accomplished. What we must then be able to multiply that number by–the "work count"–whether known or anticipated, would be a countable number of times that work unit was to be performed or accomplished. Put another way, this means that work units must have recognizable beginning and end points–they must be discrete, non-overlapping entities of work.

5. Work unit structures must be complete. They must cover *all* of the sub-goals and activities which OHD staff may or must become involved in to carry out the goals and missions of the office.

Currently we are in the process of developing the work unit structures for OCD, ONAP, AoA, DDO and OM (CETA). RSA, OYD and the exclusively Headquarters programs will follow. However, it is important for everyone who will be impacted by the system to thoroughly understand the work unit structures, how they are arrived at, what activities are encompassed within each work unit, and what will be done next with the work unit structures. Hence, the meetings scheduled with each Regional Office are intended to have two purposes–first as a general orientation to Regional Program Staff on the concept of the system, and second, to review the latest draft of the work unit structures for each program in some detail to assure understanding and completeness, and to obtain any final suggestions, additions, clarifications, or other input. RSA and OYD staff will be given opportunity for such input when draft work unit structures have been developed in these areas, but they should participate in the planned sessions so that their later input will be made on the basis of the fullest possible understanding.

After the work unit structures have been finalized, based on both Regional Office and Headquarters program input, a form will be developed which can be used by staff to keep a simple daily record of time spent on each work unit. As presently envisioned, these forms, which will be kept as simple as possible, will be collected in each region weekly and mailed to OAM in Washington for key-punching. These records will be accumulated over 12 months in order to obtain data covering all the cylical work variations in the fiscal year and statistically analyzed to produce standard times. There should be no permanent large scale collection of data after this, on actual time spent by individuals on work units, although periodic spot checks may be used to assure that the manner of performing work units is not changing over a period of years. The only other records which will be kept will be on work counts *by unit*—not by individual. In any case, most or all work counts should be contain[illegible] records which are already maintained.

Part II

ANALYSIS OF 7th, 6th, 5th, and 4th ORDER A&TBCB

7th Order

01	Compliance with Architectural Barriers Act of 1968 are related legislation assured.
02	Research in barrier removal conducted and promoted.
03	Congress and the President advised on the status of accessibility for the handicapped and necessary legislation and policy to increase accessibility.
04	Professional and specialized audiences advised on methods to improve accessibility.
05	Non-specialized audiences informed on barrier problems and the mobility needs of the handicapped.

6th Order

01

0101	Compliance plans for Federal agencies developed, reviewed, negotiated, approved, monitored and assisted.
0102	A compliance reporting system established and operated.
0103	Complaints of violations investigated and resolved.
0104	Adequacy of accessibility standards studies and legitimate improvements promulgated.

02

0201	Research projects conducted by grant or contract and utilization of findings promoted.
0202	Research projects by other public and private agencies arranged and utilization of findings promoted.

03

0301	Public hearings planned and conducted to analyze the accessibility needs of the handicapped.
0302	Accessibility data from all sources analyzed and recommendations for needed action reported to the Congress and the President.

04

0401	Technical and professional information communicated to architects, engineers, and other technical designers and developers to improve accessibility in structures and facilities, both covered and not covered by mandatory standards.
0402	Specialized information communicated to state and local governmental organizations to improve accessibility through legislative and administrative actions in facilities both covered and not covered by mandatory standards.
0403	Specialized information communicated to owners, managers and operators of facilities to improve accessibility in those facilities, both covered and not covered by mandatory standards.

05

0501	Information accessibility communicated to a non-technical audience.
0502	Accessibility promoted through specialized media by public service announcements, posters, etc.

5th Order

01

010101	A plan developed, etc., for single agency funded, owned and occupied facilities.

010102 A plan developed, etc., for single agency funded, leased and occupied facilities.

010103 A plan developed, etc., for single agency funded and owned facilities occupied by another agency or agencies.

010104 A plan developed, etc., for single agency funded and leased facilities occupied by another agency or agencies.

010105 A plan developed, etc., for non-Federally owned facilities funded in whole or in part by Federal grants or loans.

010106 A plan developed, etc., for facilities covered under Sections 503 and 504 of the Rehabilitation Act.

02

010201 A compliance reporting system implemented in each agency and currency maintained.

The balance of the 5th Order Analysis available upon request.

A&TBCB		Standard Times			Work Counts		
4th Order		FY 75	FY 76	FY 77	FY 75	FY 76	FY 77
01000001	National policy development and planning for compliance completed.		12 mm	12 mm		1	1
01010101	Assistance given in developing a compliance plan for single agency funded, owned and occupied facilities.		.75mm	.75mm		9	9
01010102	A plan reviewed, negotiated and approved.		.5mm	.5mm		9	9
01010103	A plan monitored by other than on-site inspections.		.25mm	.25mm		9	9
01010104	A plan monitored by an on-site inspection.		3 days	3 days		9	9
01010105	Technical assistance given an agency in executing its plan.		.5mm	.5mm		9	9
01010201	Assistance given in developing a compliance plan for single agency funded, leased and occupied facilities.		.75mm	.75mm		9	9
01010202	A plan reviewed, negotiated and approved.		.5mm	.5mm		9	9
01010203	A plan monitored by other than on-site inspections.		.25mm	.25mm		9	9
01010204	A plan monitored by an on-site inspection.		3 days	3 days		9	9
01010205	Technical assistance given an agency in executing its plan.		.5mm	.5mm		9	9
01010301	Assistance given in developing a compliance plan for single agency funded and owned facilities occupied by another agency or agencies.		.75mm	.75mm		9	9
01010302	A plan reviewed, negotiated and approved.		.5mm	.5mm		9	9
01010303	A plan monitored by other than on-site inspection.		.25mm	.25mm		9	9
01010304	A plan monitored by on-site inspection.		3 days	3 days		9	9
01010305	Technical assistance given an agency in executing its plan.		.5mm	.5mm		9	9
01010401	Assistance given in developing a compliance plan for single agency funded and leased facilities occupied by another agency or agencies.		.75mm	.75mm		9	9
01010402	A plan reviewed, negotiated and approved.		.5mm	.5mm		9	9
01010403	A plan monitored by on-site inspection.		.25mm	.25mm		9	9
01010404	A plan monitored by on-site inspection.		3 days	3 days		9	9
01010405	TA given an agency in executing its plan.		.5mm	.5mm		9	9

Appendix H

Testimony Of A&TBCB'S Executive Director Before The House District Committee's Subcommittee On Bicentennial Affairs, The Environment, And The International Community

TESTIMONY

of

JAMES S. JEFFERS
Executive Director
Architectural and Transportation Barriers Compliance Board
Washington, D.C.

before the

House District Committee's Subcommittee on
Bicentennial Affairs, the Environment,
and the International Community

June 5, 1975

On behalf of the Architectural and Transportation Barriers Compliance Board, and as Executive Director of the Board, I should like first to extend my appreciation for this opportunity to present testimony regarding Bicentennial planning activities to provide accessibility to handicapped citizens.

Before addressing our specific Bicentennial related activities, it may be of interest to the Committee to know more about the primary mission of the Board and the kinds of activities in which we are currently engaged. As you know, the Board was established in Section 502 of the Rehabilitation Act of 1973 (P.L. 93-112) as a quasi-independent agency whose statutory members include the Cabinet level officials of the Departments of Health, Education, and Welfare; Transportation; Housing and Urban Development; Labor; Interior; Defense; the General Services Administration; United States Postal Service; and Veteran's Administration. The primary purpose of the Board is to ensure nation-wide compliance with the prescribed standards of accessibility developed pursuant to the Architectural Barriers Act of 1968 (P.L. 90-480) as amended by the Act of March 5, 1970 (P.L. 91-205). This Act requires that buildings and facilities constructed or altered through any Federal assistance be accessible to and usable by handicapped individuals. In carrying out its regulatory responsibilities, the Board is empowered through the Rehabilitation Act Amendments of 1974 to issue a final and binding order of compliance which may include the suspension or withholding of Federal funds with respect to any building of any department, agency, or instrumentality of the United States.

In addition, the Board is responsible for initiating investigatory approaches into the nature of architectural, transportation, and attitudinal barriers confronting handicapped individuals, particularly with respect to public buildings, monuments, parks and parklands, residential and institutional housing. Although the Board is in the formative stages of assembling its organizational staff structure, we have initiated major program activities during the past few months. These include, but are not restricted to, the establishment of mechanisms for developing necessary information regarding the environmental needs of disabled individuals, and the criteria to meet those needs; and the fostering of voluntary compliance with respect to all valid public complaints of non-compliance with current Federal standards of accessibility. Further, it may interest the Committee to know that the Board will be holding its second national public hearing this month which will address the area of housing for disabled individuals. As a result of these types of activities, the Board is already establishing permanent working relationships with many organizations in such fields as architectural design, transportation and housing.

With regard to the topic of this testimony, it may interest you to know that the subject of Bicentennial planning provisions for handicapped individuals was included in the agenda of the last Board meeting held March 31. At this meeting, Mr. James T. Clarke, Assistant Secretary for Management, Department of Interior, indicated that in an effort to re-examine and supplement existing plans, the Board's staff should comprehensively examine the Bicen-

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tennial needs of disabled visitors for the development and modification of new and existing projects.

In response to this directive, we are undertaking to expand the Board's activities relating to Bicentennial projects and have during the past few months been in contact with related representatives of the Department of Interior, National Parks Service, and the National Visitors' Center. As a result of these meetings, close working relationships have been established, with the Board providing technical assistance through the review and analysis of construction and modification plans such as those for the Washington Monument, Jefferson and Lincoln Memorials, National Visitors' Center, Constitution Gardens, as well as the many incidental related projects to provide accessibility in such places as the White House and Ellipse areas.

Although representatives from the various Bicentennial related agencies and offices have proved extremely receptive to our involvement, it should be emphasized that at this time the Board has limited staff resources to positively assure that all project activities are providing for the needs of disabled visitors. With this in mind, I would stress the importance of self-initiated design, review, and planning considerations in all current projects under way.

Specifically, our Bicentennial related role has been that of a consultant providing advice, guidance, and direction whenever requested. This role primarily exists as a result of the formation of a closely coordinated and cooperative relationship with the National Capital Parks Service. The need and existence of this consultation between the two offices was first identified and initiated by Mr. Manus Fish, Director of the National Capital Parks. An agreement was reached early this year between Mr. Fish and Mr. Stanley B. Thomas, Jr., Chairman of our Board, and Assistant Secretary for the Office of Human Development at the Department of Health, Education, and Welfare, which provides for Board review and comment on all major Bicentennial related projects of the National Capital Parks Service.

As a result of this cooperative arrangement, I have become personally involved in working with Mr. L.A. Rowell, National Capital Parks Coordinator for Bicentennial Development. Activities to date include the review and approval of the planned renovations to provide accessibility in the Lincoln and Jefferson Memorials; the incorporation of special access provisions to the Constitution Gardens project; and more currently the identification of needed internal alterations to the Washington Monument. Board staff has also been working to provide guidance in removing site and facility barriers to the handicapped in both the White House and Ellipse areas.

Additionally, I have on several occasions met with Mr. James Gross, Director of the National Visitors' Center, to emphasize the importance of including the necessary accessible design features into renovation of the Union Station facility. Mr. Gross has been most cooperative in stressing the importance of incorporating complete and comprehensive standards of accessibility to his technical working staff. However, because of the structural nature of this building, it has become obvious that the incorporation of the required minimum standards will fall short of the desired ends, and supplemental renovations may prove necessary.

It may also interest the Committee to know that the Board is currently working in association with the Rehabilitation Services Administration to provide advice and guidance to a project under way with the George Washington University to provide a comprehensive Bicentennial Access Guide for disabled visitors. The guide will provide information relative to the Washington Metropolitan area accessibility and availability provisions of such essential items as hotel, restaurant, and service accommodations, emergency contact points, maps, and related service systems.

With regard to the provision of transportation accommodations for disabled visitors, it is my understanding that the District of Columbia Bicentennial Commission and Assembly has been in contact with the Department of Transportation in this regard. Further, it is anticipated that some type of demonstration may be requested of the Department of Transportation to facilitate the mobility of handicapped and elderly visitors.

I again reiterate my appreciation for this opportunity to emphasize the importance of ensuring that the needs of disabled visitors are not overlooked in the preparations for our National Bicentennial Observance and I welcome any related questions the Committee may have.

Appendix I

Part I

UMTA Proposed Regulations-Elderly And Handicapped Transportation

Part II

Response To Proposed UMTA Regulations By The Department Of Health, Education, And Welfare As Prepared By A&TBCB Staff

federal register

WEDNESDAY, FEBRUARY 26, 1975
WASHINGTON, D.C.
Volume 40 ■ Number 39
PART III

THE NATIONAL ARCHIVES OF THE UNITED STATES • 1934 •

Part I

DEPARTMENT OF TRANSPORTATION

Urban Mass Transportation Administration

■

ELDERLY AND HANDICAPPED TRANSPORTATION SERVICES

Codification of Requirements

DEPARTMENT OF TRANSPORTATION

Urban Mass Transportation Administration

[49 CFR Part 609]

[Docket No. 74-03, Notice 1]

ELDERLY AND HANDICAPPED TRANSPORTATION SERVICES

Codification of Requirements

The Urban Mass Transportation Administration (UMTA) is considering issuing regulations to codify existing requirements and establish new requirements related to transportation services for the elderly and the handicapped.

Section 16(a) of the Urban Mass Transportation Act of 1964, as amended, states that elderly and handicapped persons have the same right as other persons to utilise mass transportation facilities and services. This section further directs that special efforts be made in the planning and design of mass transportation facilities and services to ensure the availability of transportation which can be effectively utilised by elderly and handicapped persons. Section 165(b) of the Federal-Aid Highway Act of 1973, as amended, extends the mandate of section 16 to mass transportation projects funded under the Federal-aid highway programs of title 23, United States Code.

THE ELDERLY AND HANDICAPPED PUBLIC

Dimensions. At the time of the 1970 Census there were 20,066,000 people in the United States age 65 and over, of whom 56 percent live in urbanized areas (50,000 population). The per capita income of the elderly tends to be above the level for persons under age 65, although the proportion of elderly below the poverty threshhold is higher than that of the population as a whole. Approximately 7 million of the elderly, or just over one-third, are handicapped to a degree such that the use of mass transportation services is difficult or impossible. The aging are generally concentrated in older neighborhoods of cities, in special retirement developments or communities, and in regions with warm climates. Like most of the general population, the elderly make the overwhelming majority of trips by car, as either drivers or passengers. On the other hand, there are large segments of the elderly population that are either rural or urban poor, and a large number that do not have access to private transportation.

Roughly, 6,340,000 persons under the age of 65 suffered from handicaps that would cause them difficulties in using mass transit systems, taking into account non-institutionalized handicapped persons with chronic visual and hearing impairments, those using mobility aids such as walkers, wheelchairs, crutches and canes, and those with other special mobility limitations, aids and acute conditions. Together with the one-third of the elderly who also suffer from handicaps, the total estimate of the transit-dysfunctional handicapped is 13,370,000 as of the 1970 Census.

The total population that is elderly or handicapped, with no double-counting, was estimated at 26,506,000 in 1970. Of this total, approximately 14.8 million persons live in urbanized areas. Unlike the elderly, the handicapped are widely dispersed throughout the population. The latest information available indicates that the number of able-bodied elderly and the number of handicapped (elderly and non-elderly) are approximately equal. The majority of persons who are handicapped suffer from some mobility limitation short of using crutches, wheelchairs or walkers (8,800,000), have visual impairments (1,970,000), or have acute conditions (e.g., broken legs) (490,000). There are estimated to be 430,000 persons who use a wheelchair, 410,000 persons who use a walker, and 330,000 deaf persons. (Unless otherwise specified, all statistics are drawn from the U.S. Department of Transportation's 1973 study entitled "The Handicapped and Elderly Market for Urban Mass Transit.")

Travel barriers. Not all of the elderly or the handicapped experience significant mobility limitation. An affluent, able-bodied, elderly driver, for example, has transportation experiences and needs quite different from that of either a handicapped nondriver of limited financial resources or an able-bodied poor elderly person in an automobile-oriented area. To the degree to which the elderly and/or handicapped have transportation difficulties, however, they tend to cluster around these areas: (1) Cost of obtaining service; (2) availability of service; and (3) physical demands made on passengers by the design of transportation facilities and equipment. Section 5 of the Urban Mass Transportation Act of 1964, as amended, mandates a one-half fare or less at non-peak hours for the elderly and handicapped on mass transportation systems receiving UMTA operating assistance. UMTA is implementing the half-fare requirement through the grant process. See 40 FR 2537.

This proposed rule deals primarily with the service and hardware aspects of the public transportation for the elderly and the handicapped. First, this proposed rule would require local transportation planners and operating officials to identify the travel requirements of elderly and handicapped persons and to develop specific plans and programs to meet these requirements. It would further condition the approval of grants for capital assistance on the development and implementation of such plans and programs. Second, the proposed regulations would prescribe design standards for mass transportation equipment and facilities in order to diminish the impediments to their use by persons with physical impairments.

The proposed rule. Persons who had the opportunity to review and comment on the original draft proposed rule that was discussed at public meetings in November 1974 will notice several substantial changes that have been made in response to comments from elderly and handicapped groups, transit planners, transit operators, governmental agencies and manufacturers of transit equipment.

First, every effort has been made to make it clear that the persons who are special beneficiaries of the statutes mandating service to the elderly and handicapped are members of the general public and an important potential market for transit service. Much of the terminology that the elderly and handicapped users indicated that they found offensive has been eliminated, and the regulation recast in the language of equipment features rather than characteristics of elderly or handicapped users. The requirements for special attention to their specific needs in planning and programming have been retained because the governing statutes require "special efforts" and because of the need for administrative control.

Second, a number of the requirements have been restated as performance rather than design standards, in response to user, operator and manufacturer comments indicating reservations with respect to the wisdom, safety and usefulness of some of the proposed rules and the fact that some of the features intended to confer a benefit on some handicapped users were viewed as creating a potential hazard for other handicapped users. Mandatory arm rests, for example, were deleted for this reason. The inclusion and specific design of many features has therefore been left to local option, with a requirement that the issues involved be discussed at the public hearings on the grant application.

Third, the effective dates of the requirements have been accelerated so that the main body of the requirements will be effective either 30 days after final publication of the regulations or within the next fiscal year's funding cycle. Specific effective dates for accessibility requirements in the proposed regulation denote features that are beyond the present state of the art or are now commercially unavailable and thus will require product development, tooling or retooling.

Planning. The elderly and handicapped form an important segment of the potential market for mass transportation services. Very little is known, however, about their actual mobility requirements and options, which will vary depending on their income, degree of personal independence, proximity to existing transit, access to automobiles, attitude towards public transportation and/or special services and a variety of other highly individual factors. Because of these individual factors, it may be fallacious to use perceived mobility need as a surrogate for estimates of potential transit use. The purpose of the planning requirement in this proposed regulations is to ensure that careful thought and study is given to the issue at the local level in view of the great variety among urban areas and the varying stages of development of transit service within those areas.

Subpart B requires the immediate commencement of unified planning work program elements leading to the development of a regional plan for meeting the transportation needs of elderly and handicapped persons. UMTA grantees of planning assistance have already been instructed to be prepared to meet this requirement beginning with the 1975–76 planning cycle. Effective October 1, 1976, the five-year transportation improvement programs and plans (which are a precondition to the receipt of UMTA capital assistance) must include an element designed to analyze and meet the transportation needs of elderly and handicapped persons. The annual element of the program will be reviewed by the Urban Mass Transportation Administrator.

Capital assistance. The capital assistance application procedures of Subpart C are designed to ensure that the programs planned under Subpart B will be implemented. Prior to October 1, 1976, each capital grant application must incorporate assurances that the planning is under development and that the other requirements of this part are being met. After October 1, 1976, the capital grant application must either incorporate specific requests for funding parts of the program required by Subpart B or must indicate when such requests will be forthcoming. Since the program itself will be available to UMTA representatives through the unified work program, it will not be necessary to include it in every capital grant application. The specific design of accessibility features that are left to local option must be discussed at the public hearing on the capital grant application.

1. *Fixed facilities*. Section 609.15 requires that stations, terminals, buildings or other facilities designed, constructed or altered after the effective date of these regulations will be controlled by the minimum standards contained in the "American Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, Number A117.1–1961," the so-called ANSI standards. The definitions, waiver and exception provisions of this section are consistent with those adopted by the General Services Administration. These standards will apply not only to facilities intended for use by the public but also to other buildings in which handicapped persons may be employed as a result of the inclusion of accessibility features.

In addition to the ANSI standards, UMTA is proposing standards with respect to features that are unique to transit facilities: passenger pick-up and drop-off facilities ("kiss and ride"), fare collection systems, passenger information systems, and boarding platforms. All of these requirements are designed to be consistent with the ANSI standards, and are within the existing technical state of the art.

2 *Transit Vehicles*. The premise of this proposed regulation is that standard transit equipment designed to serve the general public ought to be made physically accessible to the maximum extent feasible to elderly and handicapped users who have a level of personal mobility and independence such that their use of public transportation, were accessibility features provided, would be a reasonable expectation. As indicated earlier in this preamble, roughly half of the population specifically benefitted by these rules consists of the essentially able-bodied elderly, who tend to suffer to some degree from the ailments statistically correlated with aging—visual impairment, hearing impairment, general physical weakness and personal insecurity. In a substantial number of the elderly, these difficulties have progressed to the point where they may pose a hindrance if not an absolute obstacle to transit use. Many of the proposed regulations are intended to provide interior design features that will make transit use easier for these users by easing the physical demands that the vehicle makes on the passenger. All transit vehicles purchased with funds from grants made after the effective date of these regulations will therefore be required to have padded interior handrails and stanchions, slip-resistant floor surfaces, priority seating arrangements, improved interior lighting, vehicle destination signs that are designed and located for maximum visibility, public address systems, barrier-free fare collection arrangements, improved door control mechanisms and an additional retractable lower step to minimize passenger difficulty in entering the vehicle. Some of this equipment is not currently available commercially. UMTA welcomes comment in particular on the appropriate effective dates for redesigned door control mechanisms, retractable lower steps and destination signs in view of the product development process that would be required. UMTA would also welcome comment on the effect of these requirements on current commuter rail technology.

The regulations differentiate between vehicle types for reasons that are partly technological, partly practical. The requirements for step-entry vehicles are made applicable to vehicles of a length in excess of 22 feet, which includes both full-sized standard transit vehicles and minibusses but not small specialized vans for which many of the requirements are inappropriate.

The regulations further differentiate between vehicles that do not require a passenger to make an unassisted level change in boarding the vehicle and those that do so require. Rapid rail facilities and other grade-separated systems such as personal rapid transit, for example, are built so that the passenger platform is at the same approximate height as the entrance to the vehicle, making it possible for a passenger to roll or walk into the car. UMTA proposes to require in § 609.17 that all such vehicles and their related facilities should be accessible to passengers in wheelchairs, that the interface between the vehicle and the platform should be as close as is technologically feasible in order to facilitate access, and that the interior of the vehicle should be designed to accommodate and secure the wheelchair. No proven wheelchair securement device is available commercially at the present time; UMTA welcomes comment on an appropriate effective date for this requirement.

Some transit modes—e.g., buses, light rail, commuter rail—operate at grade, typically in the stream of ordinary street traffic, and require the passenger to step up into the vehicle from the street or curb. The design of these vehicles assumes that the prospective passenger can make such a change in level unassisted, and with sufficient speed and dexterity to allow for a more or less steady flow of passengers making similar movements on and off the vehicle. The current generation of bus and trolley standard transit equipment does not contemplate a mechanical device to assist passengers in changing levels. Although there are some such devices in use on equipment designed especially for service to the handicapped, there is no device presently developed and proven reliable for use in a standard forty-foot urban transit bus or light rail vehicle. The proposed regulations would therefore require the development of a new stairwell on these vehicles with an initial step height from the ground of no more than 8 inches (the current bus requires the passenger to step up 15 inches), and tread depth of at least 10 inches. We invite comment on an appropriate implementation date for this requirement, which should be of great assistance to the entire class of elderly and handicapped users as well as the able-bodied members of the general public. The interior of the vehicles will be subject to the design standards of § 609.19.

A major UMTA research and development effort to design a new generation of transit equipment may be on the verge of providing a solution to the level-changing problem on at-grade vehicles. The three Transbus prototypes, currently undergoing operational demonstrations in major urban centers, are each equipped with level-changing devices—ramps in the case of the Rohr and AM General models, a lift in the case of the GM model. Most importantly from the point of view of the great majority of elderly and handicapped users who can negotiate steps but who find the steps on the current bus uncomfortably steep, the Transbus will have a lower floor and a two-step rather than three-step entry.

The Urban Mass Transportation Administrator has recently issued a policy statement on Transbus which indicates that UMTA will develop a performance specification based on the prototypes, and that if no unforeseen problems develop the performance specification will require a low-floor bus plus a ramp or lift device to accommodate wheelchair users. UMTA is currently exploring the development of such a device for future inclusion on the new generation of light rail vehicles developed also under its R&D program. Interior design features intended to facilitate use of the equipment by elderly and handicapped passengers will of course also be required. The completion of Transbus prototype testing is currently scheduled for August 1975; the performance specification will be developed concurrently, and the first of the new buses should be in revenue service by late 1977 or early 1978. The UMTA decision to proceed with a performance specification rather than a detailed design specification has accelerated significantly the anticipated availability of the Transbus.

In addition to this effort, UMTA has also recently announced the award of a study contract to determine the optimum specific characteristics of a small bus used in transit service. The study will focus special attention on the contribution that such vehicles can make toward meeting the needs of the elderly and handicapped persons.

Contacts with parties prior to notice. UMTA issued a notice of meeting in the November 12, 1974 FEDERAL REGISTER, inviting interested parties to review and comment on a tentative draft regulation at informal hearings held November 25, 26, and 27 at the U.S. Department of Transportation headquarters in Washington, D.C. The hearings were held in order to solicit constructive comments from elderly and handicapped persons, operators of mass transportation systems, and manufacturers of mass transit equipment prior to UMTA's formulation of the proposed rule.

Statements made at these hearings by representatives of elderly and handicapped users favored all measures that would eliminate physical barriers to mass transportation systems, particularly for the wheelchair user. The concept of a totally separate transportation system for the elderly and handicapped in lieu of accessibility features on standard equipment was opposed by these representatives because they felt that such a system would segregate the users from the rest of the public and could obviate efforts directed toward full accessibility.

Representatives of the transit operators emphasized the need for flexibility at the local level in determining the appropriate service for the elderly and handicapped public within each urbanized area. The specific suggestions of the transit operators were submitted to UMTA on December 20, 1974 by the American Public Transit Association in the form of a completely re-drafted proposed regulation.

The manufacturers who attended these preliminary hearings stressed the need for performance standards rather than design specifications to permit maximum flexibility and creativity in producing equipment modifications for elderly and handicapped persons. Most representatives were optimistic about being able to produce the necessary hardware to satisfy the transportation needs of the elderly and handicapped, assuming adequate lead-time for designing new equipment and re-tooling production lines.

The opinions and suggestions presented at the hearings and submitted to UMTA in the subsequent comment period have been carefully considered in the vision of this proposed regulation.

Public comments and regional public hearings. UMTA welcomes comments on the proposed rule, particularly written comments that suggest specific ways in which the regulations may be improved. Interested parties are invited to participate in the making of the rule by submitting to UMTA such written data, views, or arguments as they may desire. Communications should identify the regulatory docket (No. 74–03) and be submitted to the following address: Urban Mass Transportation Administration, Office of the Chief Counsel, Docket No. 74–03, Room 9320, 400 7th Street SW., Washington, D.C. 20590. All written communications received on or before April 30, 1975, will be considered by the Urban Mass Transportation Administrator before action is taken on the proposed rule. The proposed rule contained in this notice may be changed as a result of comments received. All comments submitted will be available, both before and after the closing date for comment in the Office of the Chief Counsel for examination by interested parties.

In order to increase the opportunity for comments which can be used to evaluate and improve the proposed rule, UMTA will hold six public hearings during the public comment period. The hearings will be held on the following schedule in the indicated cities:

Monday, April 7, 1975—Los Angeles, California
Wednesday, April 9, 1975—Denver, Colorado
Friday, April 11, 1975—Chicago, Illinois
Tuesday, April 15, 1975—St. Petersburg, Florida
Thursday, April 17, 1975—Boston, Massachusetts
Tuesday, April 22, 1975—Washington, D.C.

Exact locations will be published in the FEDERAL REGISTER no later than March 7, 1975, and also in local daily newspapers at least 30 days before the hearing and again within 10 days before the hearing. Each hearing will have a daytime session beginning at 9:30 a.m. and an evening session beginning at 7:30 p.m.

The hearings will be informal in nature and will be conducted by a senior UMTA official representing the Administrator. At each hearing an UMTA spokesman will make a brief opening statement. Since the hearings will not be of the evidentiary or judicial type, there will be no cross-examination of those persons presenting statements. However, interested persons wishing to make rebuttal statements may do so in the same order as the initial statements were made.

All interested persons are invited to attend the hearings, and each such person is invited to present oral or written statements concerning the proposed rule at one of the hearings. Persons making oral statements are strongly encouraged to submit the substance of their remarks in written form either at the hearing or by mail to the Office of the Chief Counsel, Docket No. 74–03 (see address above) in time to arrive on or before April 30, 1975.

The sequence of speakers at each hearing will be based on the order of registration. Persons who wish to ensure an opportunity to speak should register in advance of the hearing by notifying UMTA of the date, city, session (daytime or evening), and amount of time requested. Such requests for advance registration must be made by mail to the Office of the Chief Counsel, Docket 74–03 (see address above).

If a very large number of persons request an opportunity to speak at a given hearing, UMTA reserves the right to restrict the length of time allowed for each oral statement in order to give the maximum number of persons the opportunity to be heard.

This amendment to title 49, Code of Federal Regulations, is proposed under the authority of sections 5 and 16, Urban Mass Transportation Act of 1964, as amended (49 U.S.C. §§ 1604, 1612); section 165(b), Federal-Aid Highway Act of 1973, as amended (23 U.S.C. § 142nt.); section 504, Rehabilitation Act of 1973 (29 U.S.C. § 794); and 49 CFR § 1.50. Section 315 of the Department of Transportation and Related Agencies Appropriations Bill of 1975, although not part of UMTA's permanent and substantive statutory authority, provides an additional basis for these regulations.

In consideration of the foregoing, it is proposed to amend chapter VI of title 49 of the Code of Federal Regulations by adding a new part 609 as set forth below.

Issued on February 21, 1975.

FRANK C. HERRINGER,
Urban Mass Transportation Administrator.

PART 609—ELDERLY AND HANDICAPPED

Subpart A—General

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Subpart D—Requirements for Formula Apportionment Projects

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AUTHORITY: Sec. 5 and 16, Urban Mass Transportation Act of 1964, as amended (49 U.S.C. 1604, 1612); sec. 165(b), Federal-Aid Highway Act of 1973, as amended (23 U.S.C. 142nt.); section 504, Rehabilitation Act of 1973 (29 U.S.C. 794); 49 CFR 1.50.

Subpart A—General

§ 609.1 Purpose.

The purpose of this part is to establish formally the requirements of the Urban Mass Transportation Administration (UMTA) on the subject of transportation services for elderly and handicapped persons.

§ 609.3 Definitions.

As used herein:

"Elderly person" means any individual age 65 or over.

"Handicapped person" means any individual who, by reason of illness, injury, age, congenital malfunction, or other permanent or temporary incapacity or disability, including those who are nonambulatory wheelchair-bound and those with semiambulatory capabilities, is unable without special facilities or special planning or design to utilize mass transportation facilities and services as effectively as persons who are not so affected.

"Level-entry vehicle" means any vehicle which does not require the passenger to negotiate a step or steps, or to use a level-change mechanism such as a lift or ramp, in order to board and exit.

"Step-entry vehicle" means any vehicle which requires the passenger to negotiate a step or steps, or to use a level-change mechanism such as a lift or ramp, in order to board and exit.

§ 609.5 Applicability.

(a) This part, which applies only to projects approved by the Urban Mass Transportation Administrator after the part's effective date, applies to all transit planning, capital assistance, and operating assistance projects receiving Federal financial assistance under sections 3, 5, or 9 of the Urban Mass Transportation Act of 1964, as amended (49 U.S.C. 1602, 1604, or 1607a), and all projects receiving Federal financial assistance under (1) subsection (a) or (c) of section 142 of title 23, United States Code, (2) paragraph (4) of subsection (e) of section 103, title 23, United States Code, and (3) section 147 of the Federal-Aid Highway Act of 1973, as amended. Subpart C (Requirements for Capital Assistance Projects) expressly applies to capital assistance projects receiving Federal financial assistance under any of the above statutes.

(b) Unless otherwise noted, this part is effective 30 days after publication of the final regulation in the FEDERAL REGISTER. Where a requirement in this part includes a specific effective date, such requirement applies to facilities and equipment in projects approved by the Urban Mass Transportation Administrator after such effective date.

§ 609.7 Waiver.

The requirements set forth in this part may be modified or waived on a case-by-case basis upon application to the Urban Mass Transportation Administrator if the Administrator determines that such waiver or modification is clearly necessary and is consistent with the intent of the laws cited under "Authority." Any request for waiver of any provision of these regulations must be presented for comment at the public hearing required prior to submission of a project application to UMTA.

Subpart B—Requirements for Transportation Planning

§ 609.9 Transportation planning in urbanized areas.

(a) The requirements in this section apply to transit planning for all urbanized areas. General requirements for transportation planning in urbanized areas have been published in a joint Federal Highway Administration-UMTA notice of proposed rulemaking at 39 FR 39660.

(b) All unified work programs for planning which include funding requests for UMTA planning assistance shall include work items for the metropolitan planning organization with the participation of public transportation agencies of the region, sufficient to develop or maintain a regional plan and program for meeting the transportation needs of elderly and handicapped persons. The regional implementation plan and schedule shall provide for an annual review of unmet needs by representatives of health, welfare, comprehensive planning, and transportation agencies of the region.

(c) Transportation improvement programs and transportation plans submitted to UMTA on or after October 1, 1976, shall include an element designed to meet the transportation needs of elderly and handicapped persons. At a minimum this element of these programs and plans shall include:

(1) An identification of the elderly and handicapped persons within the urbanized area, their location in relation to regular route transit services, and the type and approximate number of trips projected to be taken on public transportation (purpose, time of day, origins and destinations);

(2) A description of the public and private resources presently devoted to meeting the transportation needs of the elderly and handicapped persons in the urbanized area;

(3) A description of the public and private transportation services currently in the urbanized area and the degree to which they contribute to meeting the transportation needs of elderly and handicapped persons; and, if all the public transportation needs of elderly and handicapped persons are not being met by those services, an explanation of the nature of and reasons for the deficiency.

(4) A range of alternative service improvements for meeting the transportation needs of elderly and handicapped persons, and the justification for selecting a specific alternative from among those available. The selected alternative may draw on more than one method of service improvement.

(d) The elderly and handicapped portion of the annual element of the transportation improvement program is subject to the approval of the Urban Mass Transportation Administrator.

§ 609.11 Transportation planning in nonurbanized areas.

Effective October 1, 1976, in nonurbanized areas planning equivalent to that required by § 609.9 must be accomplished on an appropriate scale before a capital assistance project can be approved for that area.

Subpart C—Requirements for Capital Assistance Projects

§ 609.13 Applications for capital assistance.

(a) Before October 1, 1976, each application for capital assistance shall provide an assurance that:

(1) A definite plan and program for meeting the transportation needs of the elderly and handicapped persons is under development or completed pursuant to §§ 609.9 and 609.11.

(2) All valid alternatives for meeting the transportation needs of elderly and handicapped persons have been or will be evaluated in the development of the plan and program.

(3) The provisions in the project for elderly and handicapped persons, and the relationship of this project to the plan and program required by §§ 609.9 and 609.11, have been explained at the public hearing required during the application process. When the application involves new rolling stock, details on the features of that equipment, including stanchion and handrail configurations, fare collection equipment, and priority seating arrangements that particularly serve elderly and handicapped persons shall be presented at the public hearing. Persons desiring to comment on that explanation at the public hearing must be heard. Evidence of the applicant's response to such comments shall be included in the application.

(4) All facilities and equipment contained in the project will meet the applicable requirements of this part.

(b) After October 1, 1976, each application for capital assistance shall provide an assurance that:

(1) A definite plan and program for meeting the transportation needs of the elderly and handicapped has been developed pursuant to §§ 609.9 and 609.11.

(2) All valid alternatives have been evaluated in the development of the proposed plan and program;

(3) The application requests funding for those projects or items accorded current implementation priority under the plan and program required by §§ 609.9 and 609.11. If the application does not include all such projects or items, the application must include a justification satisfactory to the Urban Mass Transportation Administrator and a proposed schedule for submission of appropriate applications.

(4) The provisions in the project for elderly and handicapped persons, and the relationship of this project to the plan and program required by §§ 609.9 and 609.11, have been explained at the

public hearing required during the application process. When the application involves new rolling stock, details on the features of that equipment, including stanchion and handrail configurations, fare collection equipment, and priority seating arrangements that particularly serve elderly and handicapped persons shall be presented at the public hearing. Persons desiring to comment on that explanation at the public hearing must be heard. Evidence of the applicant's response to such comments shall be included in the application.

(5) All facilities and equipment contained in the project will meet the applicable requirement of this part.

§ 609.15 Fixed facilities.

(a) Except as otherwise provided in paragraph (b) of this section, every fixed facility—including every station, terminal, building, or other facility—designed, constructed, or altered after the effective date of this part, which either will require that such fixed facility be accessible to the public or may result in the employment therein of physically handicapped persons, shall be designed, constructed, or altered in accordance with (1) the minimum standards contained in the "American Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, Number A117.1—1961," approved by the American Standards Association, Inc. (subsequently changed to American National Standards Institute, Inc.) [ANSI], and (2) the additional standards of paragraph (d) of this section.

(b) The standards established in paragraph (a) of this section do not apply to:

(1) The design, construction, or alteration of any portion of a fixed facility which need not, because of its intended use, be made accessible to, or usable by, the public or by physically handicapped persons;

(2) The alteration of an existing fixed facility if the alteration does not involve the installation of, or work on, existing stairs, doors, elevators, toilets, entrances, drinking fountains, floors, telephone locations, curbs, parking areas, or any other facilities susceptible of installation or improvements to accommodate the physically handicapped;

(3) The alteration of an existing fixed facility, or of such portions thereof, to which application of the standards is not structurally possible; and

(4) The construction or alteration of a fixed facility for which bids have already been solicited or plans and specifications have been completed or substantially completed after the effective date of this part.

(c) The final project application for any project that includes the design, construction, or alteration of a fixed facility subject to paragraph (a) of this section shall contain one of the following: (1) An assurance that the standards of paragraph (a) of this section will be adhered to in the design, construction, or alteration of such facility; (2) a request for a finding that the project is within one of the exceptions set out in paragraph (b) of this section, with appropriate supporting material; or (3) a request for waiver of the standards of paragraph (a) of this section. In any case in which a waiver or exception is requested, the grounds therefor shall be presented and discussed at the public hearing on the proposed project; any person seeking to comment thereon shall be heard and his comments responded to on the record of the public hearing.

(d) In addition to the ANSI standards of paragraph (a) of this section, the following standards apply to fixed facilities covered by that paragraph.

(1) Passenger pick-up and drop-off facilities: Stations with automobile passenger pick-up and drop-off facilities shall provide at least one stopping area identified for the use of handicapped persons. This stopping area shall have minimum dimensions of 12 feet wide and 22 feet long, and shall be located as near as possible to the station entrance(s) and exit(s) accessible to handicapped persons.

(2) Fare collection systems: The fare vending system shall be designed so as not to prevent effective utilization of the transportation system by passengers with physical impairments. Each fare control area shall include at least one entrance with a clear opening of at least 36 inches when open for the use of persons who use mobility aids.

(3) Information systems: Passenger waiting and boarding areas in major, enclosed stations shall have both public address and visual announcement systems for announcing transit information, including vehicle arrival, departure, destination, and route designation.

(4) Boarding platforms: All boarding platform edges bordering a drop-off or other dangerous condition shall be marked with a warning device consisting of a strip of floor material differing in color and texture from the remaining floor surface. The design of boarding platforms for level-entry vehicles shall be coordinated with the vehicle design in order that the difference in elevation between platform and vehicle doorway not exceed 1.5 inches and the horizontal gap between platform and vehicle doorway not exceed 2 inches.

§ 609.17 Level-entry vehicles.

(a) New level-entry vehicles shall be accessible to elderly and handicapped persons and shall conform to the standards of this section.

(b) Entrances and exits: (1) Vehicle entrances and exits shall have a clear opening of at least 36 inches. If the entire system is not fully accessible, entrances and exits to fully accessible vehicles shall be identified on the vehicle exterior as accessible to handicapped persons. Vehicle doors shall open automatically and shall be equipped with devices which prevent vehicle motion when the door is open, prevent door closure on any person or object in the doorway, and prevent door opening when the vehicle is in motion. Warning signals shall be provided to alert elderly and handicapped passengers of closing doors.

(2) The design of level-entry vehicles shall be coordinated with the boarding platform design in order that the difference in elevation between platform and vehicle doorway not exceed 1.5 inches and the horizontal gap between platform and doorway not exceed 2 inches.

(c) Priority seating signs: Each vehicle shall contain clearly legible sign(s) which mark specific seats to be made available to elderly and handicapped persons when they are present. The proposed location of the signs and seats shall be presented at the hearing required by § 609.13(b)(4).

(d) Wheelchair securement devices and travel clearance: (1) Effective January 1, 1976, at least one wheelchair securement device shall be provided inside the vehicle, as near as possible to the entrance(s) accessible to handicapped persons. The device(s) shall be located so that the secured wheelchair does not impede the mobility of the nonhandicapped passenger.

(2) Sufficient travel clearance shall be provided to enable the wheelchair user to reach the securement position with minimal movements and manipulation of the wheelchair.

(3) The securement device shall be operable by the wheelchair user and shall be attached to the vehicle structure with integrity comparable to that of seat mounting.

(4) The wheelchair securement device is not required for a level-entry vehicle which is operated on a system which has fewer than two wheelchair-accessible stations.

(e) Interior handrails and stanchions: Padded handrails and stanchions shall be sufficient to permit safe boarding, onboard circulation, seating assistance, and unboarding by passengers with physical impairments.

(f) Floor surface: All floors shall have slip-resistant surfaces.

(g) Lighting: The interior of the vehicle shall average between 15 and 30 footcandles of illumination measured at 36 inches above the floor, except that when the vehicle has an open operator's position, the level of illumination shall not exceed 8 footcandles.

(h) Public address system: Vehicles shall be equipped with a public address system audible throughout the vehicle.

(i) Destination and route signs: (1) This paragraph is effective January 1, 1976.

(2) Each vehicle or train shall have a sign on the front of the vehicle or train exterior. The sign shall include the route designation or destination or both in characters 6 inches high.

(3) Each vehicle or train shall have a sign on the boarding side of the vehicle or train exterior. This sign shall include the route designation or destination or both in characters at least 4 inches high.

§ 609.19 Step-entry vehicles.

(a) The requirements of this section apply to all new step-entry vehicles with a length of at least 22 feet.

(b) Entrances and exits: (1) Vehicles shall be equipped with device(s) which prevent vehicle motion when the door is open, prevent door closure on any person or object in the doorway, and prevent door opening when the vehicle is in motion.

(2) Effective January 1, 1976, the maximum height of each step from street level to vehicle floor level shall be uniform and no more than 8 inches; the depth of tread of each step shall be uniform and at least 10 inches. The step surfaces of retractable steps shall be designed to resist the collection of snow, slush, and dirt.

(c) Fare collection: Vehicle fare collection arrangements shall be designed so as not to prevent effective utilization of the vehicle by passengers with physical impairments.

(d) Priority seating signs: Each vehicle shall contain clearly legible sign(s) which mark specific seats to be made available to elderly and handicapped persons when they are present. The proposed location of the signs and seats shall be presented at the hearing required by § 609.13(b)(4).

(e) Interior handrails and stanchions: Padded handrails and stanchions shall be sufficient to permit safe boarding, fare collection, on-board circulation, seating assistance, and unboarding by passengers with physical impairments.

(f) Floor and step surfaces: All floors and steps shall have slip-resistant surfaces.

(g) Lighting: (1) The interior of the vehicle shall average between 15 and 30 footcandles of illumination measured at 36 inches above the floor, except in the immediate vicinity of the vehicle operator's position where the level of illumination shall not exceed 8 footcandles.

(2) Stairwells shall have between 2 and 5 footcandles of illumination measured on the step tread.

(3) The vehicle shall have light(s) which provide 2 to 5 footcandles of illumination measured on the road, sidewalk, or platform 2 feet away from the vehicle's entrance and exit in a horizontal direction.

(h) Public address system: Vehicles shall be equipped with public address systems audible inside and outside the vehicle.

(i) Destination and route signs: (1) This paragraph is effective January 1, 1976.

(2) Each vehicle shall have an illuminated sign on the front of the vehicle exterior. The sign shall include the route designation or destination or both in characters 6 inches high.

(3) Each vehicle shall have illuminated signs on the boarding side and rear of the vehicle exterior. These signs shall include the route designation or destination or both in characters at least 4 inches high.

(4) Illuminated signs shall be free of extraneous light.

Subpart D—Requirements for Formula Apportionment Projects

§ 609.21 Capital projects receiving formula assistance.

Sections 609.15 through 609.21 apply to all construction and other capital assistance projects receiving Federal financial assistance under section 5 of the Urban Mass Transportation Act of 1964, as amended (49 U.S.C. 1604).

§ 609.23 Reduced fare.

Applicants for Federal financial assistance under section 5 of the Urban Mass Transportation Act of 1964, as amended (49 U.S.C. 1604), must, as a condition to receiving such assistance, give satisfactory assurances, in such manner and form as may be required by the Urban Mass Transportation Administrator and in accordance with such terms and conditions as the Urban Mass Transportation Administrator may prescribe, that the rates charged elderly and handicapped persons during nonpeak hours for transportation utilizing or involving the facilities and equipment of the project financed with assistance under this section will not exceed one-half of the rates generally applicable to other persons at peak hours, whether the operation of such facilities and equipment is by the applicant or is by another entity under lease or otherwise.

[FR Doc.75-5158 Filed 2-25-75;8:45 am]

Part II

Response to Proposed UMTA Regulations by the Department of Health, Education, and Welfare

Response Prepared by A&TBCB Staff

April 25, 1975

Urban Mass Transportation Administration
Office of Chief Counsel
Docket Number 74-03
Room 9320
400 Seventh Street, S.W.
Washington, D.C. 20590

Gentlemen:

The Department of Health, Education, and Welfare is pleased to respond to your invitation for written comments concerning the Urban Mass Transportation Administration's proposed regulations governing transportation services for the elderly and the handicapped. As you know, an important function of this Department is to foster and support a social environment which accommodates all elements of our population, including the disabled and the aged.

The Department feels that UMTA should be commended for its responsive and concerned efforts in addressing the special planning and design requirements of the Urban Mass Transportation Act of 1964. The general approach of promoting special planning and design initiatives, as contained in the proposed rules, constitutes an important precedent in creatively furthering the many advances being made by the Department of Transportation in comprehensively responding to the transportation needs of elderly and disabled individuals.

Specifically, the conditioning of mass transit grant awards upon the demonstration of local planning initiatives in hearing and addressing the special needs of the local citizenry will assist in overcoming the existing inadequacies of traditional transportation planning and design approaches, and assure that disabled users no longer remain anonymous to transportation planners and operators. It is hoped that the Department of Transportation will continue to demonstrate such progress and responsiveness in addressing the special needs of elderly and disabled persons. To assist in this effort, we should like to offer the following recommendations:

Implementation of Section 16 of the Urban Mass Transportation Act of 1964 requires "special efforts" be made in the planning and design of mass transportation facilities and services so that the availability to elderly and handicapped persons of mass transportation which they can effectively utilize will be assured. The Act does not define "handicapped person" so as to be limited to those with physical impairments. Although the definition of "handicapped person" in Section 609.3 of the proposed rules may be interpreted to be inclusive of those with sensory or cognitive disabilities under ". . . other permanent or temporary incapacity or disability . . .," it should be recognized that the proposed design standards for mass transportation equipment and facilities do not suitably address the needs of this population element. Rather, as cited in the preamble under "Travel Barriers," their primary concern is ". . . to diminish the impediments to their use by persons with physical impairments."

The Administration on Aging had requested that the definition of elderly in the earlier draft proposed rule be modified to include persons below the age of 65, as their programs (and a number of others) establish age 60 or older as the age at which persons are eligible for services. It should be noted that although the definition of elderly is cited as 65 in the proposed rule, another proposed rule for the formula grant program authorized under Section 5 of the National Mass Transportation

Act of 1974, published in the Federal Register on January 13, 1975 (which mandates a program of reduced fares for elderly and handicapped on public transit facilities and equipment financed under that section of the statute), would permit operators of public transit to establish a lower eligibility age if they so desired. The Department strongly supports a definition of "elderly" which includes persons over 60 years of age.

Additionally, with respect to the proposed definition of "handicapped person," we would recommend deletion of the phrase ". . . including those who are nonambulatory wheelchair-bound . . . ." Wheelchair users cannot so restrictively be described through such terminology. It is frequently the case that this range of disabled individuals are possessive of limited or full ambulatory capabilities for certain durations.

Furthermore, under the proposed definition, we would strongly recommend deletion of the phrase ". . . is unable without special facilities or special planning or design . . . ." The use of such terminology implies potentially separate and burdensome efforts in the accommodation of handicapped and elderly individuals. By way of contrast, we recognize such planning and design considerations as beneficial in main to a much broader range of users as identified in the Department of Transportation publication entitled "Travel Barriers."

Therefore, on the basis of the forementioned comments we specifically recommend a revision of the proposed definition to read:

> "Handicapped person" means any individual who, by reason of illness, injury, age, congenital malfunction, or other permanent or temporary incapacity or disability, including those who are wheelchair-users and those with semiambulatory capabilities, is unable without the necessary planning and design to utilize mass transportation facilities and services as effectively as persons who are not so affected.

Additionally, under Section 609.3 "Definitions," the Department is of the opinion that transportation vehicles cannot be so catagorized under "Level-entry vehicle" and "Step-entry vehicle." Such contrast would seem inaccurate and we would specifically recommend that in this section and all subsequent references the term "Step-entry vehicle" be amended to read "Non-level entry vehicle," which includes those vehicles having a level-change mechanism such as a lift or ramp.

With regard to Section 609.5 "Applicability," we are of the opinion that these regulations must be of the broadest possible scope, consistent with the legislative intent of Section 16 of the Urban Mass Transportation Act of 1964, and applicable to all transportation-planning capital assistance programs and operating assistance projects, as well as all research and development projects. Also, to ensure such uniformity in application, especially with respect to those projects previously approved prior to the issuance of regulations as those proposed but not yet in service, we would strongly recommend the insertion of a new paragraph under Section 609.5 to read:

> (c) This part applies to all projects approved after the effective date of this part and to facilities and equipment approved before the effective date which have not been put into service within 6 months after the effective date.

Furthermore, with regard to Section 609.5(a), we are of the opinion that all buildings and fixed-facilities financed in whole or in part by loans and grants from the Urban Mass Transportation Administration are subject to the provisions of the Architectural Barriers Act of 1968 (P.L. 90-480). Specifically, we find that those sections of legislation identified in Section 609.5, to which the proposed regulations are deemed applicable, are subject to the provisions of P.L. 90-480 under subparagraph (3) of Section 1 ". . . to be financed in whole or in part by a grant or loan made by the United States after the date of enactment of this Act if such building or facility is subject to standards for design, construction, or alteration issued under authority of the law authorizing such grant or loan." It is our understanding that the legislation identified in Section 609.5 permits the authorized grants or loans to be subject to the terms or conditions imposed by the Secretary of Transportation, thereby authorizing the promulgation of design and construction standards. We are therefore of the opinion that UMTA must adhere closely to all provisions of P.L. 90-480 in such rulemaking procedures. Our findings in this regard are further elaborated and substantiated by the General Services Administration, General Counsel opinion of February 14, 1973.

On this basis, we take exception to Section 609.7 and 609.15 of UMTA's proposed rules. While we recognize that the scope of the proposed rules is mainly cast to provide the information requirements relative to the needs of transit planners and operators, some recognition within the regulations either under these sections or preferably under the section entitled "Authority," should be made of the statutory requirements of P.L. 90-480, or of the provisions of GSA's implementing Federal Property Management Regulation (FPMR) 101.17.7 as amended to 101.19.6. We also note that substantial deviation from the GSA regulations exist in Section 609.15 of the proposed rules.

Specifically, under Section 609.7 "Waiver," only the Administrator of General Services, under Section 6 of P.L. 90-480, has the authority to grant waivers or modifications for facilities subject to Section 2 of P.L. 90-480; this includes fixed-facilities of transportation systems. While we recognize that the application for such waiver requests should be directed to the Urban Mass Transportation Administrator, UMTA is not authorized to approve such waiver or modification requests with respect to fixed-facilities. To clarify Section 609.7 waiver procedures consistent with P.L. 90-480, we recommend that the first sentence be changed to read:

> The requirements set forth in this part may be modified or waived on a case-by-case basis upon application to the Urban Mass Transportation Administrator and if the Administrator of General Services determines that such waiver or modification is clearly necessary and is consistent with the intent of the laws cited under "Authority."

In addition, under Section 609.7, the Department finds it mandatory that waiver requests not only be presented for comment at the public hearing as proposed, but that adequate notice of the hearing and agenda be made to the public utilizing the three major forms of media (newspaper, television and radio), so as to provide adequate notification to the affected public inclusive of those with sensory disabilities.

Under Section 609.9 "Transportation planning in urbanized areas," subsection (b), we would specify that representatives of the elderly and handicapped population element be identified in the regional implementation plan and schedule, as well as inclusion in the annual review process. Additionally, under subsection (c) we would recommend that it be indicated that all transportation improvement programs and plans are subject to the approval of the Urban Mass Transportation Administrator. In this way, approval of the submitted plans will be more dependent upon their accuracy and responsiveness rather than upon their mere existence. Furthermore, we strongly recommend that the scope of paragraphs (1), (2), (3) and (4) under subsection (c) be broadened to include concern with all transportation disadvantaged within the urbanized area. Only in this way will the total needs of the serviced population be met in a comprehensive, non-segregated, and non-conflicting fashion. Specifically, our recommendation in this regard is to amend the language in these paragraphs referencing "the elderly and handicapped persons" to read "the transportation of disadvantaged persons," and where necessary reference the "elderly and handicapped population element." With respect to paragraph (2), we would insist that such "description of the public and private resources presently devoted to meeting the transportation needs . . ." include cost comparative data, thereby indicative not only of the presence of such resources, but their actual availability. As you know, it is frequently the case that user charges for such transportation services are inappropriate to the low incomes of most elderly and handicapped persons thereby disallowing for the actual availability of such "resources." We therefore specifically recommend that paragraph (2) be amended to read:

> (2) A description of the public and private resources in the urbanized area presently devoted to meeting the transportation needs of the disadvantaged, including all relevant data regarding the comparability of user charges.

Under paragraph (3) of this subsection our specific recommendation is to amend the language beginning on line 6 to read "and if the public transportation services cannot be effectively utilized by the elderly and handicapped population element of the transportation disadvantaged, an explanation of the nature of and reasons for the deficiency, to be accompanied by a proposed affirmative action program to resolve the deficiency."

With regard to Section 609.13 "Applications for capital assistance," subsection (b), paragraph (3), we strongly recommend the total deletion of the second sentence which provides for the exception of applications not inclusive of the information required in the proposed regulations by 609.9 and 609.11. The Department feels that any application absent of such information should neither be considered nor approved.

Additionally, with regard to 609.13, subsection (b), paragraph (4), we recommend that on line 10, both "wheelchair lifts, or ramps" be added as those detailed features which should be presented at the public hearing.

Under Section 609.15 "Fixed facilities," we are in concurrence with the exceptions cited in paragraphs (1), (2), and (3) of subsection (b) only on the basis of their exact consistency with FPMR 101.19.6. However, special attention is directed to the exception provision detailed in paragraph (4). In order to provide accurate information to transit planners and operators consistent with FPMR 101.19.6 and the developing compliance program of the Architectural and Transportation Barriers Compliance Board (A&TBCB), we strongly recommend that this paragraph be changed to read:

> (4) The construction or alteration of a fixed facility for which bids have already been solicited or plans and specifications have been completed or substantially completed on or before September 2, 1969.

Our reasons for this recommendation are twofold. Having established that we are of the opinion that the provisions of P.L. 90-480 are applicable to all fixed-facilities financed in whole or in part by UMTA grants or loans, it is doubtful that the compliance regulations of the A&TBCB will recognize the provisions of any agency regulations contrary to P.L. 90-480 and the existence implementing GSA regulations. Secondly, the structure of paragraph (4) inclusive of the exception provision for plans and specifications completed "after the effective date of this part" negates all intent and rationale for providing such allowances.

Additionally, under Section 609.15, subsection (d), paragraph (4), we strongly advise UMTA to revise the proposed boarding platform design specifications to be consistent with the American National Standards Institute safety codes for elevators (ANSI-A-17).

Use of the ANSI standards would provide a maximum 0.75 inch difference in elevation between platform and vehicle doorway rather than the proposed 1.5 inches; and a maximum 1 inch gap between the platform and vehicle doorway, rather than the proposed 2 inches.

With reference to Sections 609.17 "Level-entry vehicles," and 609.19 "Step-entry vehicles," it is noted that the design requirements of these sections are inconsistent with each other, and the development of a standardized design policy in meeting the travel needs of elderly and disabled users. We would insist upon a uniform policy between the two classes of vehicles in providing accessible "entrances and exits," "wheelchair securement devices," and "public address systems."

In an effort to provide uniformity in the design specifications, as well as improved standards for addressing the needs of elderly and disabled transportation users, the Department specifically recommends that under Section 609.17 "warning signals," be both audible and visual, and under paragraph (2), that 1.5 inches be amended to read 0.75 inch, and 2 inches be amended to read 1 inch, as previously discussed.

Under subsection (d) of Section 609.17, we recommend that the phrase "and will be of optional use by the handicapped passenger," be added to the last sentence of this subsection. We feel that the inclusion of this provision is necessary to make clear that such devices are provided for the safety and comfort of those disabled travelers who feel the need to utilize the securing devices.

Additionally, under this subsection we recommend the deletion of paragraph (4) and encourage UMTA to adopt a uniform and consistent policy regarding wheelchair securement devices.

We also recommend that subsection (h) of 609.17 be amended to read consistently with the provisions of subsection (h) of 609.19, and that in subsection (i), paragraphs (2) and (3) of both Sections 609.17 and 609.19, the vehicle sign include both "route designation and destination," and that the six inches high character requirement on the front of the vehicle be stated as a minimum with an equivalent requirement on the boarding side of the vehicle.

Under Section 609.19(b), the Department strongly recommends the insertion of a new paragraph stating:

> (3) Effective January 1, 1976, all step-level entry vehicles shall be equipped with a ramp or lift device to enable the effective utilization of the vehicle by persons who cannot utilize step entrances. Where a ramp device is used the slope shall not exceed 8.33%.

Although the proposed regulations contain numerous provisions for the convenience of the handicapped and elderly, there are no provisions relating to overcrowding. Requiring easy access to busses and special areas for wheelchairs will be of little benefit if passageways are blocked, thereby preventing the elderly and the handicapped from reaching the special areas or leaving them. The proposed rules should be strengthened in an attempt to avoid this potential problem.

The opportunity to comment on these proposed regulations is sincerely appreciated, and if at any point in the future there is any assistance that we can provide as you develop the regulations, please do not hesitate to call upon us.

Sincerely,

/s/ Caspar W. Weinberger

Secretary

Appendix J

Attachment A Extract : 4660.1

Attachment B Order : 4660.2

Attachment C Chapter 13 : 4660.1 Chg 8

Attachment D Advisory Circular : AC No 150/5200-11

Attachment A

Extract: 4460.1

Appendix 1. Public Laws And Authorities Related To Acquisition And Management Of Real Property

1. FEDERAL AVIATION ACT OF 1958 (72 STAT. 731), SECTION 303(c) ACQUISITION AND DISPOSAL OF PROPERTY

(c) The Administrator, on behalf of the United States, is authorized, where appropriate:

(1) to accept any conditional or unconditional gift or donation of money or other property, real or personal, or of services;

(2) within the limits of available appropriations made by the Congress therefor, to acquire by purchase, condemnation, lease or otherwise, real property or interests therein, including, in the case of air navigation facilities (including airports) owned by the United States and operated under the direction of the Administrator, easements through or other interests in airspace immediately adjacent thereto and needed in connection therewith: PROVIDED, that the authority herein granted shall not include authority for the acquisition of space in buildings for use by the Federal Aviation (Administration), suitable accommodations for which shall be provided by the Administrator of General Services, unless the Administrator of General Services determines, pursuant to section 1(d) of Reorganization Plan Numbered 18, 1950 (64 Stat. 1270; 5 U.S.C. 1332-15 note), that the space to be acquired is to be utilized for the special purposes of the Federal Aviation (Administration) and is not generally suitable for the use of other agencies;

(3) for adequate compensation, by sale, lease, or otherwise, to dispose of any real or personal property or interest therein: PROVIDED, that, except for airport and airway property and technical equipment used for the special purposes of the (Administration), such disposition shall be made in accordance with the Federal Property and Administrative Services Act of 1949, as amended; and

(4) to construct, improve, or renovate laboratories and other test facilities and to purchase or otherwise acquire real property required therefor. Any such acquisition by condemnation may be made in accordance with the provisions of the Act of August 1, 1888 (40 U.S.C. 257; 25 Stat. 357), the Act of February 26, 1931 (40 U.S.C. 258a–258e; 46 Stat. 1421), or any other applicable Act: PROVIDED, that in the case of condemnation of easements through or other interests in airspace, in fixing condemnation awards, consideration may be given to the reasonable probable future use of the underlying land.

2. INTERNATIONAL AVIATION FACILITIES ACT (62 STAT. 450)

a. *Section 3, Establishment and Operation, in Foreign Territory, of Facilities Related to Aviation.* Subject to concurrence of the Secretary of State, and with due regard for the objectives of the International Civil Aviation Organization, the Administrator of the Federal Aviation Agency (hereinafter referred to as the "Administrator") and the Chief of the Weather Bureau of the Department of Commerce, within their respective fields, are authorized, by contract or otherwise, to acquire, establish, and construct airport property and airway property in foreign territory: PROVIDED, HOWEVER, that, except in the case of airport property transferred under section 8, no airport (as defined in section 1 of the Civil Aeronautics Act of 1938, as amended) may be acquired, established, or constructed under authority of this section unless funds for such purpose have been specifically appropriated by the Congress.

b. *Section 6, Transfer of Airport Property or Airway Property to a Foreign Government or an International Organization.* The Administrator . . . , upon request of the foreign government involved or of any international organization, may transfer any airport property or airway property operated and maintained by him within foreign territory, pursuant to the provisions of this Act, to the foreign government involved or to any international organization. The Administrator . . . , is authorized to make such transfer upon such terms and conditions as he deems proper, including provision for receiving, on behalf of the United States, such payment or other consideration for the property so transferred as may be agreed upon through negotiations with the foreign government or the international organization involved.

c. *Section 7, Facilities, Service and Property in the Canal Zone and in the Republic of Panama.*

(a) Subject to the approval of the Secretary of Defense, the Administrator is authorized to provide air navigation, communications, and air traffic control facilities and services in the Canal Zone and the Republic of Panama and to do all things necessary in connection with the operation and maintenance thereof.

(b) In exercising and performing his powers and duties under this section, the Administrator shall do so consistently with any obligation assumed by the United States in any treaty, convention, or agreement that may be in force between the United States and the Republic of Panama.

(c) Any department of the Defense Department is authorized in its discretion to transfer without charge therefor to the Administrator any airport property or airway property or other real or personal property which (1) is located in the Canal Zone or the Republic of Panama, and (2) is determined by the Administrator to be, or likely to become, useful in carrying out the purposes of this Act.

(d) The authority conferred by the section may be exercised without regard to sections 3 and 8(a) of this Act.

d. *Section 8(a), Transfer of Certain Property from the National Military Establishment to the Administrator.*

(a) When considered consistent with the needs of national defense, and subject to such conditions, if any, as may be agreed upon in specific cases between the parties, any department of the Defense Department is authorized to transfer at its discretion to the Administrator, without charge therefor, airport property and airway property, exclusive of meteorological facilities, installed by or in the possession of such department in territory (including Alaska) outside the continental limits of the United States, which such department has found to be no longer required exclusively for military purposes and which in the opinion of the Administrator are, or are likely to become, necessary for carrying out the purposes of this Act.

e. *Section 9, Authority to Retake Property Transferred Under Section 7 or 8.* When necessary to meet military requirements, as determined by the Secretary of the department which made the transfer, such department is authorized immediately to retake any property transferred under section 7 or section 8, together with any improvements or additions made thereto: PROVIDED, that the Secretary of such department, upon the recommendation of the Administrator . . . , is authorized in any case to waive any right or privilege conferred or reserved by this section. In the event property is retaken, which incorporates improvements or additions not made at Government expense, reasonable compensation shall be paid to the person or persons who made such improvements or additions, or to their successors in interest. The Secretary of the department which made the transfer, or his duly authorized representative, shall determine, for purposes of this section, what is reasonable compensation for such improvements or additions.

f. *Section 10, Powers of Administrator . . . With Respect to Certain Airport Property and Airway Property.*

(a) With regard to airport property and airway property in territory (including Alaska) outside the continental limits of the United States which he has acquired pursuant to this Act or any other provision of law, the Administrator is empowered and directed to do and perform, by contract or otherwise, all acts and things necessary or incident to their consolidations, operation, protection, maintenance, improvement and administration, including but not limited to the power (1) to adapt, from time to time, such properties to the needs of civil aeronautics by construction, installation, reengineering, relocation, or otherwise; (2) to make and amend such reasonable rules and regulations as he may deem necessary to the proper exercise of the powers granted by this section; (3) to lease under such conditions as he may deem proper and for such periods as may be desirable (not to exceed twenty years) space or property for purposes essential or appropriate to their consolidation, operation, protection, and administration under this Act; (4) to contract for, or to provide directly for, the sale of fuel, oil, equipment, food and supplies, hotel accommodations, and other facilities and services necessary or desirable for the operation and administration of such properties; (5) to make just and reasonable charges for aeronautical services (including but not limited to landing fees and fees for the use of communications services); and (6) to acquire, by purchase or otherwise, real or personal property, or interests therein, which he may consider necessary for the purposes of this section. Any person who knowingly and willfully violates any rule or regulation issued by the Administrator under clause (2) of this section, if such violation is committed in any area under the civil jurisdiction of the United States, shall be deemed guilty of a misdemeanor and upon conviction thereof shall be subject to a fine of not more than $500 or to imprisonment not exceeding six months, or to both such fine and imprisonment.

(c) All funds received under this section, as a result of direct sale or charge by the Administrator . . . and which, in the judgement of the Administrator . . . , are equivalent to the cost, including handling charges, of the fuel, oil, equipment, food, supplies, services, shelter, or other assistance or services sold or furnished shall be credited to the appropriation from which the cost thereof was paid, and the balance, if any, shall be credited to miscellaneous receipts.

(d) The provisions of section 3709 of the Revised Statutes, as amended (41 U.S.C. 5) shall not apply to any of the leases or contracts made by the Administrator . . . pursuant to the provisions of this Act.

3. ACT OF MAY 24, 1928, AN ACT TO AUTHORIZE THE LEASING OF PUBLIC LANDS FOR USE AS PUBLIC AVIATION FIELDS

Section 4. Beacon Lights and Other Air-Navigation Facilities; Establishment on Unreserved and Unappropriated Lands. The Secretary of Interior is authorized, in his discretion and under such rules as he may prescribe, to grant permission for the establishment of beacon lights and other air-navigation facilities, except terminal airports, upon tracts of unreserved and unappropriated public lands of the United States of appropriate size, and may withdraw the lands for such purposes.

4. SECRETARY OF THE INTERIOR INSTRUCTION PERTAINING TO ROADS, TRAILS, BRIDGES, ETC., IN NATIONAL FORESTS—EXCEPTION IN PATENTS (44 L.D., 513)

INSTRUCTIONS
JANUARY 13, 1916
ROADS, TRAILS, BRIDGES, ETC., IN NATIONAL FORESTS—EXCEPTION IN PATENTS

Where "roads, trails, bridges, fire lanes, telephone lines, cabins, fences and other improvements necessary for the proper and economical administration, protection, and development of the national forests" have been actually constructed and are being maintained upon public lands of the United States under the provisions of the Act of March 4, 1915, or survey has been made and the area needed for such improvements definitely fixed and the construction thereof has been provided for and will be immediately undertaken, and the lands are thereafter disposed of under any of the public land laws, the final certificate and patent should except such portion thereof as is so devoted to public purposes.

JONES, FIRST ASSISTANT SECRETARY:

I am in receipt of your (Secretary of Agriculture) letter of November 4, 1915, referring to the instructions of this Department, dated August 31, 1915 (44 L.D., 359), to the Commissioner of the General Land Office, concerning constructed Forest Service telephone lines crossing lands within national forests and listed and entered under the homestead law of June 11, 1906. The Commissioner of the General Land Office was there instructed as follows:

In cases where telephone lines or like structures have been actually constructed upon the public lands of the United States, including national forest lands, and are being maintained and operated by the United States, and your office is furnished with appropriate maps or field notes by the Department of Agriculture so prepared as to enable you to definitely locate the constructed line, proper notation thereof should be made upon the tract books of your office and if the land be thereafter listed or disposed of under any applicable public-land law, you should insert in the register's final certificate and in the patent when issued the following exception: "Excepting, however, from the conveyance that certain telephone line and all appurtenances thereto, constructed by the United States through, over, or upon the land herein described, and the right of the United States, its officers, agents or employees to maintain, operate, repair or improve the same so long as needed or used for or by the United States."

In your present communication, you refer to the appropriation act of March 4, 1915 (38 Stat. 1100), containing the following provision: "For the construction and maintenance of roads, trails, bridges, fire lanes, telephone lines, cabins, fences and other improvements necessary for the proper and economical administration, protection and development of the national forests, $400,000"—and state as follows:

"This act provides for the construction of such improvements of the foregoing class as may be necessary for the purpose already enumerated, and provides as well for the maintenance of those which are already constructed. The expenditure of money from this subappropriation, in accordance with its provisions, would appear to me directly to result in devoting to public purposes the land upon which such money is expended. This expenditure may be either for construction or maintenance. One of the first and most desirable things, either for construction or maintenance, is definite location by means of survey. I see no reason why the expense of such survey should not be charged against the subappropriation quoted, and it would appear to me that such expenditure would in itself be sufficient to devote the land to public purposes as being 'necessary for the purpose of proper and economical administration, protection and development of the National Forests.'

"I shall appreciate it if you will advise me whether in the case of such expenditure and the subsequent listing of the land, your Department has authority to include such an exception in the final certificate and patent, provided at the time of listing you are furnished with evidence of the fact that a certain part of the land has been so devoted to public purposes, accompanied by the necessary tracing showing the location and extent of such appropriation."

5. SECTION 322 OF THE ECONOMY ACT OF 1932, AS AMENDED, 40 U.S.C. 278a

After June 30, 1932, no appropriation shall be obligated or expended for the rent of any building or part of a building to be occupied for government purposes at a rental in excess of the per annum rate of 15% of the fair market value of the leased premises at the date of the lease under which the premises are to be occupied by the Government nor for alterations, improvements and repairs of the premises in excess of 25% of the amount of the rent for the first year of rental terms or for the rental term if less than one year. Provided, that the provisions of this section shall not apply to leases made prior to June 30, 1932, except when renewals thereof are made after such date, nor to leases of premises in foreign countries for the foreign services of the U.S. Provided further, that the provisions of this section as applicable to rentals shall apply only where the rentals to be paid shall exceed $2,000 per annum.

Attachment B

ORDER

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

4660.2

6/17/70

SUBJ: ACCESSIBILITY OF FAA BUILDINGS TO THE PHYSICALLY HANDICAPPED

---

1. **PURPOSE.** This order:

a. Establishes agency policy with respect to making buildings and facilities accessible to the physically handicapped as required by Public Law 90-480 and Part 101-17 of the Federal Property Management Regulations; and

b. Announces the publication of pertinent standards and procedures in Chapter 13 of the Real Property Handbook, 4660.1.

2. **POLICY.**

a. It is the policy of FAA that all agency owned or leased buildings (as defined in paragraph 3 below) which are designed, constructed, or altered, in whole or in part, after 2 September 1969 shall be designed, constructed, or altered in such a manner that they are accessible to, and usable by, the physically handicapped.

b. P.L. 90-480 requires that portions of "buildings" that are being modified be made accessible to the physically handicapped without regard to its location within the building. Whenever feasible, minimum additional modifications may be made to ensure that the physically handicapped has access to those portions of the building that have been modified for their use.

3. **DEFINITION.** "Building" is defined as any building or facility (other than a privately owned residential structure and any building or facility on a military installation designed and constructed primarily for use by able-bodied military personnel) the intended use for which either will require that such building or facility be accessible to the public, or may result in the employment or residence therein of physically handicapped persons, which building or facility is:

a. To be constructed or altered by or on behalf of the United States;

b. To be leased in whole or in part by the United States after 2 September 1969 after construction or alteration in accordance with plans and specifications of the United States; or

c. To be financed in whole or in part by a grant or a loan made by the United States after 2 September 1969 if such building or facility is subject to standards for design, construction, or alteration issued under authority of the law authorizing such grant or loan.

/s/ K. M. Smith
K. M. SMITH
Deputy Administrator

CHAPTER 13. ACCESSIBILITY OF FAA BUILDINGS TO THE PHYSICALLY HANDICAPPED

701. PURPOSE. This chapter implements Public Law 90-480 and agency policy as stated in Order 4660.2 with respect to making buildings accessible to the physically handicapped.

702. DEFINITIONS. For the purpose of this chapter, the following definitions shall apply.

a. Alteration (see Note 1, Appendix 48, page 1). Any work performed on those parts of existing buildings or their appurtenances that are susceptible of installation or improvement to accommodate the physically handicapped. These include, but are not limited to, the following:

(1) Stairs
(2) Doors
(3) Elevators
(4) Toilets
(5) Entrances
(6) Drinking fountains
(7) Floors
(8) Telephone locations
(9) Curbs
(10) Parking areas
(11) Vending machine areas
(12) Convenience outlets

b. Building. As defined in P.L. 90-480, "building" means any building or facility (other than a privately owned residential structure and any building or facility on a military installation designed and constructed primarily for use by able-bodied military personnel) the intended use for which either will require that such building or facility be accessible to the public, or may result in the employment or residence therein of physically handicapped persons, which building or facility is:

(1) To be constructed or altered by or on behalf of the United States;

(2) To be leased in whole or in part by the United States after 2 September 1969 after construction or alteration in accordance with plans and specifications of the United States; or

(3) To be financed in whole or in part by a grant or a loan made by the United States after 2 September 1969 if such building or facility is subject to standards for design, construction, or alteration issued under authority of the law authorizing such grant or loan.

703. POLICY. As stated in Order 4660.

a. It is the policy of FAA that all agency owned or leased buildings (as defined in paragraph 702b above) which are designed, constructed, or altered, in whole or in part, after 2 September 1969 shall be designed, constructed, or altered in such a manner that they are accessible to, and usable by, the physically handicapped.

b. P.L. 90-480 requires that portions of "buildings" that are being modified be made accessible to the physically handicapped without regard to its location within the building. Whenever feasible, minimum additional modifications may be made to ensure that the physically handicapped has access to those portions of the building that have been modified for their use.

704. STANDARDS. GSA regulations implementing P.L. 90-480 have been published as Part 101-17, Construction and Alteration of Public Buildings, of the Federal Property Management Regulations (see Appendix 47 for a copy of the GSA regulations). These GSA regulations establish the American Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, Number

A117.1-1961, as the Government-wide standard for making buildings accessible to the physically handicapped. Copies of the aforementioned standards may be purchased from the American National Standards Institute at 1430 Broadway, New York, New York 10018.

705. APPLICABILITY. All FAA buildings and facilities have been determined to fall within the meaning of paragraph 702b except for those few facilities or portions of facilities which are unmanned or must be manned entirely by personnel without physical handicaps. Appendix 48 provides a summary, in chart form, showing which FAA buildings or portions of buildings must be made accessible to the physically handicapped, which FAA buildings or portions of buildings may be made accessible to the physically handicapped, and which FAA buildings or portions of buildings are exempt.

706. EXEMPTIONS.

a. The standards contained in A117.1-1961 shall not apply when one or more of the conditions listed in Section 101-17.704 of the FPMR's are applicable. Until experience more clearly defines the conditions under which the exceptions may be used, all but the most obvious cases shall not be exempted under the provisions of Section 101-17.704. If questions exist with respect to the applicability of one of the exceptions, a recommendation shall be submitted to request a waiver or modification (see paragraph 707 below) from GSA.

b. Section 101-17.704(d) shall not be used to exempt buildings or facilities when the start of their construction is delayed sufficiently to permit the inclusion of these standards. In all cases, an 18-month period between completion of plans and specifications (including standard plans and specifications) and the start of construction shall be considered an adequate period to incorporate these standards into the design.

c. The development of standards for residential structures (including employee housing) is under consideration by the Department of Housing and Urban Development. Any standards developed by HUD applicable to FAA structures will be issued as a change to this chapter. Pending issuance of residential standards by HUD, FAA employee housing is to be considered exempt from the provisions of P.L 90-480.

707. RECOMMENDATION FOR WAIVER FROM, OR MODIFICATION TO, PROVISIONS OF PUBLIC LAW 90-480 (RIS: LG 4660-2). The applicability of the standards contained in A117.1-1961 to those FAA owned or leased buildings defined in paragraph 702b may be waived or modified on a case-by-case basis under Section 101-17.705 of the FPMR's. However, such waiver or modification must be approved by GSA. The applicability of the standards to other FAA owned or leased buildings may be waived or modified as specified in paragraph 707a below.

a. General. When in the judgment of the director of the region, center, or Bureau of National Capital Airports, or Manager, Headquarters Operations, sufficient cause exists with respect to a specific building or facility or portion thereof to justify requesting a waiver or modification to the provisions of P.L. 90-480, the director of the region, center, or Bureau of National Capital Airports, or Manager, Headquarters Operations, may recommend that such a waiver be requested. The recommendation shall be submitted in accordance with instructions contained in paragraphs b and c below. Requests for waivers or modifications to FAA policy as contained in paragraph 703b above shall be prepared in the same manner as required to obtain waivers or modifications from GSA. The approval level for waivers or modifications to FAA policy as contained in paragraph 703b above shall be the region or center directors, the Manager, Headquarters Operations, or the Director, Bureau of National Capital Airports, as appropriate.

b. Data To Be Submitted. When a GSA waiver is required, the report Recommendation for Waiver from or Modification to, the Provisions of Public Law 90-480 (RIS: LG 4660-2) shall be submitted in letter format, and shall contain sufficient detail to permit Washington Headquarters evaluation and the development of a formal request to GSA. Specific information to be included in the narrative is:

(1) Name and location of building or facility for which the waiver or modification is being requested.

(2) Size of building or facility.

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(3) Reason(s) for the recommendation.

(4) Estimated cost to comply with the provisions of P.L. 90-480.

(5) Impact on agency mission, programs, etc. (if not covered in (3) above).

c. Submit recommendation to the Logistics Service, Attention LG-200.

(1) When recommendation for waiver or modification involves ARTCC's, FSS's, ATCT's, or other similar technical type facility, the Logistics Service will forward the recommendation to the Facility Installation Service for action.

(2) The Logistics Service will handle those recommendations involving buildings and facilities not covered under (1) above.

d. Coordination and Preparation of Formal Request for Waiver or Modification from GSA.

(1) FI shall coordinate recommendation with LG, PN, GC, AM, RD, and using organization(s).

(2) LG shall coordinate recommendation with GC, PN, and AM, and when incidental technical space is involved, with RD, FI, and using organization(s).

(3) FI or LG, as appropriate, shall prepare the formal request to GSA (for S-1 signature). Each request for waiver or modification shall be forwarded to OA-1 and shall contain the following items.

(a) The formal request to GSA for S-1 signature (when required).

(b) A letter from OA-1 to S-1 requesting the waiver or modification be submitted to GSA (when required).

(c) A briefing letter to OA-1 prepared by FI or LG, as appropriate. This briefing letter shall outline the position of the coordinating offices and recommend approval or disapproval of the request. Where nonconcurrence(s) is received on the recommended action, the nonconcurring office(s) shall prepare a letter outlining the reason for the nonconcurrence(s).

(d) When appropriate, letter(s) of nonconcurrence.

708. RECORDKEEPING. Each new construction or alteration project shall be documented with a statement either (a) that the standards contained in A117.1-1961 are applicable to and have been or will be incorporated in the design, construction, or alteration; (b) that the standards have been waived by the Administrator of GSA, OA-1, or other official as appropriate (in which event the justification for waiver shall be stated); (c) that the project is within one of the exceptions set out in Section 101-17.704 (the specific exception being identified) of the FPMR's; or (d) such other statement as may be appropriate with respect to application of the standards. This documentation shall be available to the Administrator of GSA upon request.

709. FUNDING. Funding requirements resulting from the application of the criteria contained in this chapter shall be justified and authorized in accordance with existing budgetary and fiscal policies.

APPLICATION OF STANDARDS FOR MAKING BUILDINGS ACCESSIBLE TO THE PHYSICALLY HANDICAPPED

FIGURE 1. OFFICE BUILDINGS

Work Performed	Type of Space	Applicability of Standards	Decision Level To Approve Exemption
Constructed or altered by or on behalf of the United States and constructed or altered by a prospective lessor in accordance with plans and specifications of the United States before that building is leased in whole or in part to the United States	All space being constructed or altered[1]	Make accessible	GSA – Submit request for waiver to LG-1 (P.L. 90-480 requirement)
	Areas necessary to make altered space accessible	Make accessible if feasible	Local Decision
Altered by lessor (not by or on behalf of the U.S.)	Make FAA space accessible whenever possible and feasible.		Local decision

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[1] Only that portion of a building that is actually being altered must be made accessible to the physically handicapped. The remaining portion of the building may be made accessible, if feasible. For example, if the second floor of a building is being altered, only the second floor must be made accessible. The remaining floors may be made accessible, but it is not mandatory. In this case, it may be appropriate to give special consideration to those portions of the building and its appurtenances that require alteration to permit the physically handicapped to use the second floor.

APPLICATION OF STANDARDS FOR MAKING BUILDINGS ACCESSIBLE TO THE PHYSICALLY HANDICAPPED

FIGURE 2. TECHNICAL BUILDINGS

Work Performed	Type of Building or Facility	Type of Space	Applicability of Standards	Decision Level To Approve Exemption
Any	Unmanned air traffic, air navigation, and communication facilities, and manned facilities where no employee may have physical handicaps (medical certification necessary)	All	Exempt	
Constructed or altered by or on behalf of the United States and constructed or altered by a prospective lessor in accordance with plans and specifications of the United States before that building is leased in whole or in part to the United States	ARTCC's, FSS's, ATCT's, and similar facilities	All administrative space and any operating space where the physically handicapped are or may be employed[1]	Make accessible	GSA – Submit request for waiver to LG-1 (P.L. 90-480 requirement)
		Operating space where physically handicapped cannot be employed	Exempt	
Altered by lessor (not by or on behalf of the United States)	Make FAA space where physically handicapped are or may be employed accessible whenever possible and feasible.			Local decision

[1] Physically handicapped persons are or may be employed in the following positions:

Air Traffic Control Facilities

1. Administrative Assistant
2. Secretarial
3. Clerical (Teletypist positions included)
4. Receptionist
5. Cartographer
6. Facility Officers
7. Facility Staff Specialists

Airway Facilities

1. Electronic Technician positions involved only in benchwork type duties
2. Clerical support positions
3. Administrative support positions

Attachment D

AC NO: AC 150/5200-11
DATE: 11/27/68

ADVISORY CIRCULAR

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

SUBJECT: AIRPORT TERMINALS AND THE PHYSICALLY HANDICAPPED

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1. PURPOSE. This advisory circular discusses the problems of the physically handicapped air traveler and suggests features that can be incorporated in the modification or new construction of airport terminal buildings and surrounding areas to help such travelers in movement and the use of facilities.

2. REFERENCE. American Standard Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, dated October 31, 1961, may be obtained from the American Standards Association, Inc., 10 East 40th Street, New York, New York 10016.

3. BACKGROUND. The speed and comfort of air travel have, over the past several years, become more and more appealing to people who are physically handicapped. Airport terminal facilities, as the point of transition between air and surface transportation, have not, with a few notable exceptions, kept pace with the convenience offered by the airplane. It is in these areas that the handicapped may experience the greatest degree of discomfort and inconvenience. Even among those physically handicapped persons who are ambulatory, such as the blind, people with cardiovascular ailments, or the aged, the problems in making that transition can be uncomfortable and may be dangerous. The situation can be alleviated at little extra cost, however, by thoughtful consideration of their special needs, especially if the problem is faced in the planning stage. The United States Public Health Service has estimated that one American out of every twelve has some degree of ambulatory limitation, and concern for his welfare is not only humanitarian but leads to the increased good will of the handicapped person, his family, and his friends.

4. ENDORSEMENT. These recommendations have been reviewed and are strongly supported by the President's Committee on Employment of the Handicapped. The Committee points out that many of the so-called functional limitations generally attributed to persons with ambulatory impairments would largely disappear if their architectural environment were designed to accommodate their special needs. Architectural barriers, according to the Committee, are a primary deterrent to employment of the handicapped. The Committee, accordingly, considers the elimination of such barriers essential to its ultimate goal.

5. CIRCULATION. Movement about the terminal area, from surface transportation to aircraft or vice versa, is generally planned with the able-bodied person in mind. As more physically handicapped people adopt air travel, it becomes more important that some provision should be made in as central a location as possible to minimize distance to be traveled and energy expended.

   a. Vehicular Loading and Unloading Areas. Preferential treatment is often given to taxicabs and limousines in the assignment of curb lanes for loading and unloading, and the assignment is generally rigidly enforced. Physically handicapped persons arriving by other types of vehicles find it difficult to move the greater distance from lanes assigned to private cars and to cross one or more lanes of traffic plus one or more "safety islands." Consideration should be given to reserving one or two unloading spaces, properly

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indicated by signs and separated from the main flow of traffic, for the use of cars with handicapped passengers and adjacent to the airport terminal building entrance. If possible, attendants should be provided to assist with baggage.

b. Parking Areas. Since persons with serious physical disabilities may drive to airports in their own cars, the assignment of special parking areas should be considered. There are those who can drive safely but experience considerable discomfort if required to walk the long distances between parking lot and terminal building found at some airports. At larger airports, the establishment of a shuttle bus service between the two would not only help the handicapped but would find favor with able-bodied passengers who have to carry luggage.

c. Exterior Ramps and Stairways. Persons who propel themselves in wheelchairs will find ramped building entrances essential, and those who are ambulatory but require crutches or other supports find ramps helpful. Ramp gradients should not exceed 8 percent, and ramps should have nonslip surfaces with a handrail on at least one side. Canopies or radiant heating to prevent slipperiness are recommended. Where steps are unavoidable, it is preferable that exterior stairway risers should not exceed 5-3/4 inches high and tread not less than 14 inches wide. Handrails for both ramps and stairways should be 32 inches high.

d. Exterior Doors. To accommodate wheelchairs, clear openings of doors should be at least 36 inches wide. Doors should be activated mechanically by a pressure-sensitive treadle device that will hold the door open as long as the treadle is occupied on either side of the door; time-lapse devices that close doors after a prescribed delay should be avoided as dangerous to those who move slowly.

e. Interior Stairways. Risers should not exceed 7 inches in height, and 6 inches is preferred. Treads should be of nonskid material, and nosings should be avoided because they pose difficulties for persons who have artificial legs or use leg braces. A landing midway in the stair run is desirable for those who have heart disease or suffer from dizziness. Stairs should be well lit and fitted with handrails on both sides. Handrails should be 32 inches high and extend 18 inches beyond the top and bottom risers. Ramps should be provided where minor changes in floor level occur.

f. Interior Doors. The pressure required to open a door should not exceed 8 pounds, and a maximum of 5 pounds is preferable. Approaches to doors used by the physically handicapped should be level for a distance of 5 feet. Attention should be given to the direction of swing so that wheelchair occupants can open doors without complex maneuvering. Knurled knobs, handles, and panic bars are preferred and should be not more than 3 feet 6 inches above the floor level. Thresholds more than 3/4 inch high cannot be negotiated by wheelchairs. Revolving doors are useless to wheelchair users and are difficult for the blind or for persons on crutches.

g. Elevators. The movement of persons in wheelchairs from floor to floor, whether attended or unattended, can only be done effectively by an elevator. The elevator cab should be sufficiently large to accommodate a wheelchair and one or two standing persons. The average wheelchair requires a floor area of 42 inches by 25 inches. The minimum interior space required to turn a wheelchair around inside is 61 inches wide. If the elevator is automatically operated, the controls should be placed at a height that can be reached by a seated person, and the cab should be self-leveling. Doors should be adjusted to remain open at least 8 seconds, to close slowly, and to respond to both a sensitive safety edge and photoelectric cell door openers. Directional signs to the elevator should be placed at various points about the building.

h. Escalators. Wheelchairs, unless specially designed, cannot be easily moved on escalators, but persons handicapped by disability other than a loss or serious diminution of mobility will find them useful.

6. TOILET FACILITIES. At least one restroom for men and one for women in each airport terminal building should be designed to include one lavatory and one enclosure sized and fitted for use by handicapped people.

a. Toilet Enclosures and Equipment. The minimum size for frontal approach by wheelchair is 36 inches wide by 58 to 66 inches deep. A wider enclosure is desirable if assistance by another person is required.

The stall door should be not less than 32 inches wide and should open outward. The water closet should, preferably, be wall hung to allow as close an approach as possible without interference by footrests of wheelchairs. The toilet should be centered on the rear wall, and the seat should be 19 inches above the floor. Grab rails, 1-1/4 to 1-1/2 inches in diameter by 4 feet 4 inches long, placed 33 inches above the floor and clearing the wall by 1-1/2 inches, should be installed in the enclosure.

b. Lavatories. To avoid interference with wheelchairs, lavatories should be wall mounted with a clear space of 26 inches below the sink and with a shallow apron. Faucet handles should be easily operated, and self-closing faucets are to be avoided. Towel dispensers should be no higher than 40 inches from the floor.

7. SIGNS AND SIGNALS. People who are blind often display an amazing facility in moving about, even in crowds, by being trained in the use of a cane or with the asssitance of a "seeing-eye" dog. Directional signs and room identifiers are normally useless to them.

a. Signs. Certain rooms to which blind people may be directed, such as restrooms or restaurants, should be identified by signs with letters either sufficiently raised or sufficiently depressed that they may be read by touch. Such signs should be placed on the wall beside the door; if placed on the door, a sudden opening of the door while the sign is being read may result in injury. It is recommended that consideration be given to similar signs at a convenient height for touch reading to indicate loading fingers and gates.

b. Warning Signals. Signals used to indicate a hazardous condition, such as the opening of a door onto an area used by baggage trucks, should be both audible and visual to protect both the blind and the deaf.

c. Curbs. Any change from an area reserved for pedestrian movement to a roadway for vehicles should be marked by a curb, which serves as a warning to a blind person using a cane. Where curbs are constructed, a ramp wide enough to accommodate a wheelchair should be provided for those wheelchair occupants who propel themselves.

8. OTHER CONVENIENCES.

a. Drinking Fountains. Occasional drinking fountains should be positioned at such height above the floor that they can be used by occupants of wheelchairs but placed high enough that the arm of the wheelchair can be moved under the drinking fountain. Small children and their parents will also find this of benefit.

b. Telephones. Telephone booths are useless to persons in wheelchairs unless specially designed. Some hand-set type telephones should be placed at a height at which wheelchair occupants can reach the dial comfortably. A small open-fronted enclosure lined with acoustical material will help with the noise problem.

9. HOW TO OBTAIN THIS PUBLICATION. Additional copies of this advisory circular, AC 150/5200-11, Airport Terminals and the Physically Handicapped, may be obtained from the Department of Transportation, Distribution Unit, TAD-484.3, Washington, D.C. 20590.

/s/ Chester G. Bowers
CHESTER G. BOWERS
Director, Airports Service

Appendix K

Section 1
Draft Section of DOD 4270.1M

Section 2
Army Engineer Regulation #1110-1-102

Section 3
Navy Instruction—NAVACINIST 11012.137

Section 4
Chapter 8, Air Force Manual 88-4

Section 5
DOD Response to Comptroller General's Recommendations

Section 1

DRAFT SECTION OF DOD 4270.1M, THE DEPARTMENT OF DEFENSE CONSTRUCTION CRITERIA MANUAL EXPECTED TO BE PUBLISHED PRIOR TO DEC. 31, 1975

5-7.1 General

Increasing numbers of physically handicapped persons are being employed by industry and many physically handicapped civilians are employed by the DoD. In addition, the proportion of physically handicapped persons among military dependents and retirees probably does not vary significantly from the general population. Public Law 90-480 authorized the Secretary of Defense to prescribe standards of design and construction to assure that buildings were accessible to the physically handicapped. Subsequently, Public Law 93-516 added the Department of Defense as a member agency of the Architectural and Transportation Barriers Compliance Board whose principal function is to assure that Federal buildings are accessible to the handicapped. Beyond even these provisions of law, the Department of Defense has a moral responsibility to assure the handicapped access to our facilities wherever such facilities are available to dependents, retirees, or the public. Further, the handicapped worker pool represents a highly productive and valuable resource of which the Department should make full use.

5-7.2 Standards

The American National Standards Institute (ANSI) Standard A117.1 (latest edition) shall be used for the design of all appropriate facilities. Modifications or improvements to this standard should not be accomplished without consultation with the Architectural and Transportation Barriers Compliance Board Washington, D.C. 20201. All agencies are encouraged to send proposed modifications and/or improvements to the ANSI Standard to the DASD(I&H) for further transmittal to the Compliance Board. Not covered in the ANSI Standard is the design of auditoriums. Auditoriums for theaters, chapels, schools, etc., should have a portion (about 1/2) of one row of seats set aside for handicapped individuals. This area should be near an entrance and exit which is also accessible to the handicapped. The floor of the auditorium should be level in the area with a clear unobstructed width of row of at least 5 feet and preferably 6 feet. In small auditoriums this may be accomplished by reserving a space between the rear wall and last row of seats or between the first row of seats and the stage area provided that entrance and exit are available. In large auditoriums consideration should be given to providing more than one handicapped seating area with at least one near the center of the auditorium.

5-7.3 Facilities

All facilities which are open to the public, or to limited segments of the public, or which may be visited by the public in the conduct of normal business shall be designed and constructed to be accessible to the handicapped. All morale, welfare and recreational facilities, including non-appropriated fund facilities available to dependents or retirees shall be so designed. All hospitals and facilities for the care and rehabilitation of the sick and/or injured shall be so designed. All manufacturing facilities, administrative facilities, educational facilities or any other facilities where civilian workers may be employed including facilities constructed under other than Military Construction Authorizations and including contractor-owned facilities where the Department of Defense is funding all or any part of such construction shall be so designed. In fact, every facility should be designed to assure access to the handicapped unless its intended use is specifically restricted to able-bodied military personnel. Examples of facilities where access to the handicapped is not required are barracks, BOQs, closed messes, or vehicle and aircraft maintenance facilities where all work is performed by able-bodied military personnel. Inclusion of handicapped design features should be considered even for these facilities wherever feasible. In the case of family housing modification of individual units as necessary should be on an individual unit basis to be accomplished on a high priority basis when the requirement is identified. Whenever a question exists as to whether or not accessibility to the handicapped should be included, the answer should usually be affirmative. The DASD(I&H) may be queried on this matter if doubt exists.

5-7.4 When Accomplished

All appropriate new construction shall be designed to be accessible to the handicapped. Whenever substantial modification or extension of an appropriate facility is accomplished, access to the handicapped shall be included as a portion of the project, even if provision of such access requires modification to parts of the facility not otherwise included.

5-7.5 Provision of Vending Facilities for the Blind

Awaiting HEW Guidelines. When available these will be published as a supplement to this manual.

5-7.6 Assurance of Compliance

It is highly likely that the DoD will be required to maintain an inventory of those facilities which are accessible to the handicapped. Therefore, the officials who are responsible for the technical adequacy of designs shall assure that the provisions of this section are carried out and that such action is recorded. For all new construction and substantial alteration projects a certification by such official stating that the project has met the requirements of this section, or if access to the handicapped was not included, the specific reasons why it was not will be maintained in the permanent project files. To assure that consideration is given to design for the handicapped at an early planning stage all DoD Forms 1391 for appropriate facilities as listed in paragraph 5-7.3 above for the FY 1978 and subsequent Military Construction Programs shall contain a statement as to whether or not the facility will be accessible to the handicapped and if not, why not. If a waiver of these requirements is deemed necessary it should be requested from the DASD(I&H) with full particulars being set forth. It is anticipated that such waivers will be granted only in extraordinary circumstances.

Section 2

ENGINEERING AND DESIGN

Design Features to Make Buildings and Facilities Accessible to and Usable by the Physically Handicapped

1. Purpose. This regulation sets forth criteria for features to make existing and new buildings and facilities accessible to and usable by the physically handicapped. These criteria comply with Public Law 90-480 dated 12 August 1968.

2. Applicability. This regulation is applicable to all Divisions and Districts having Civil Works and/or Military Construction responsibilities. The criteria will be applicable to all new projects. New projects will not be initiated for existing facilities solely to effect compliance with the criteria; however, projects for additions or alterations to existing facilities will be reviewed with the objective of applying these criteria.

3. General. Increasing numbers of physically handicapped persons are being employed by industry as sales representatives, consultants, and advisors. Many physically handicapped civilian specialists and professional persons are being employed by the government. Civil Works and Military Construction facilities will therefore be designed to facilitate access for all persons with a legitimate reason for entry into or use of the facilities or structures. Some of the facilities likely to be used by the handicapped include such Civil Works projects as: administrative buildings; public access portions of dams, powerhouses, and locks; visitor outlooks; public use areas; and such Military Construction projects as: exchange facilities, hospitals and clinics, commissaries, religious, welfare, and recreation facilities, and administrative facilities.

4. Criteria. The provisions for physically handicapped persons will conform to the criteria established by the Department of Defense Construction Criteria Manual 4270.1-M, paragraph 5-1.5. These criteria reference American National Standards Institute, ANSI (formerly United States of America Standards Institute) publication A117.1, "Making Buildings and Facilities Accessible to and Usable by, the Physically Handicapped," and are subject to the exceptions set forth in paragraph 5, and those defined in DOD 4270.1-M. Copies of the ANSI A117.1 can be obtained by design offices from the American National Standards Institute Incorporated, 1430 Broadway, New York, New York 10018.

5. Exceptions.

a. Elevators. Unless otherwise required or permitted for a particular structure, passenger elevators will not be provided for structures less than four stories in height, including basements directly accessible from grade. Where permitted or required in multiple-story structures, passenger elevators will conform to the requirements of Section 5.9 of ANSI A117.1.

This regulation supersides ER 1110-2-102, 1 Aug 1966

b. Excluded structures. The criteria will not be applied to projects in remote and inaccessible locations, except where physically handicapped persons are likely to be employed or make use of the facilities. The criteria will not be applied to any building or facility on a military installation designed and constructed primarily for use by able-bodied military personnel.

c. Excessive costs. The criteria will not be applied if such application would increase the costs of facilities out of proportion to anticipated benefits.

FOR THE CHIEF OF ENGINEERS:

RICHARD F. McADOO
Colonel, Corps of Engineers
Executive

Section 3

NAVFAC INSTRUCTION 11012.137

From: Commander, Naval Facilities Engineering Command

Subj: Design for Accessibility of Physically Handicapped Persons

Ref: (a) DOD Construction Criteria Manual 4270.1-M
(b) Design Manual, Architecture, NAVFAC DM-1
(c) American National Standard Specifications for Making Buildings and Facilities Accessible to and Usable by, The Physically Handicapped, ANSI A117.1-1961 (R1971)

Encl: (1) Requirements For The Physically Handicapped
(2) Standard Details in Designing for The Physically Handicapped

1. Purpose. This instruction promulgates policy and criteria for the design, construction and alteration of certain Naval buildings so that physically handicapped persons will have ready access to and use of, such buildings.

2. Background. The Architectural Barriers Act was passed by Congress on August 12, 1968, and became Public Law 90-480. The purpose of this Act is to insure that certain buildings, newly constructed or altered, financed or leased with Federal funds are designed and constructed to be accessible to and usable by physically handicapped persons. Navy has the responsibility to design buildings to facilitate access for all persons with a legitimate reason for entry into, or use of, the buildings.

3. Criteria. Provisions for physically handicapped persons are established by reference (a), paragraph 5-1.6, and reference (b). These criteria refer to reference (c), subject to the exceptions set forth in references (a) and (b). Enclosures (1) and (2) are intended to supplement the minimum standards of reference (c). For facilities not listed in enclosure (1), criteria for a similar type facility shall be used.

4. Policy. Provisions for physically handicapped persons shall be included in all applicable new projects and to applicable existing facilities when substantial modifications or additions are accomplished.

5. Information. Copies of the ANSI A117.1 can be obtained from the American National Standards Institute Incorporated, 1430 Broadway, New York, New York 10010.

6. Action. Addresses shall review current and future projects under their cognizance to insure that the requirements of references (a), (b) and (c) and enclosure (1) are being implemented.

W. H. BANNISTER
Assistant Commander for
Engineering and Design

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REQUIREMENTS FOR THE PHYSICALLY HANDICAPPED
SERVICES/ACCESS REQUESTED

FACILITY	PARKING	ACCESSIBLE ENTRANCE	ELEVATORS TO PUBLIC	RESTROOMS	DRINKING FOUNTAIN	PUBLIC TELEPHONES WHERE PROVIDED	COUNTERS	PASSAGEWAYS
ADMIN. BLDGS	X	X	X	X	X	X	X	X
BANKS	X	X				X	X	X
BOWLING ALLEYS	X	X		X	X	X	X	X
CHAPELS	X	X		X	X	*		X
CHILD CARE CENTERS	X	X		X	X	X		X
CIVILIAN CAFETERIAS	X	X		X	*	X	X	X
COMMISSARY STORES	X	X		*	*	X	X	X
EDUCATION CENTERS	X	X		X	X	X	X	X
EXCHANGES	X	X		X	X	X	X	X
GYMNASIUMS	X	X		X	X	X		X
HOBBY SHOPS	X	X		X	X	X		X
LIBRARIES	X	X		X	X	X	X	X
RESERVE TRAINING CENTER	X	X		X	X	X		X
SWIMMING POOLS	X	X		X	X	X		X
THEATERS	X	X		X	X	X	X	X
YOUTH CENTERS	X	X		X	X	X		X
AIR PASSENGER TERMINAL	X	X		X	X	X	X	X
POST OFFICE	X	X					X	X
SCHOOLS	X	X		X	X	X		X
CLEANERS, HAIRDRESSING AND OTHER SERVICE SHOPS	X	X					X	X
MEDICAL FACILITIES	X	X	X	X	X	X	X	X

*WHERE NORMALLY PROVIDED FOR THE PUBLIC

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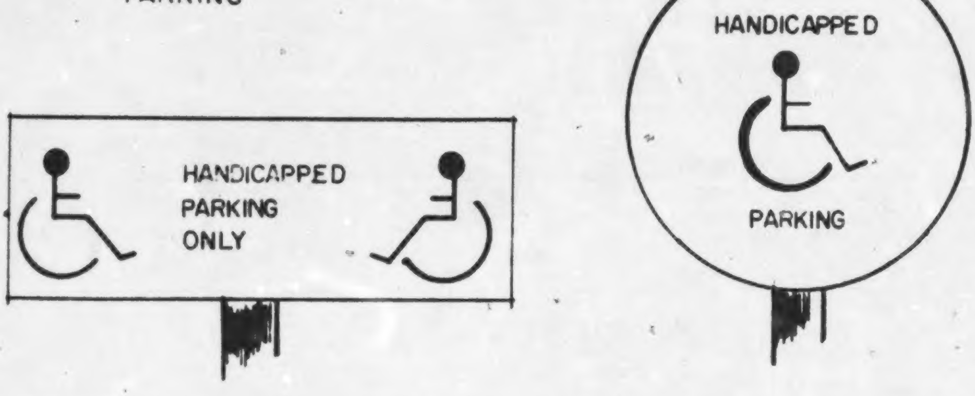
HANDICAPPED PARKING ONLY
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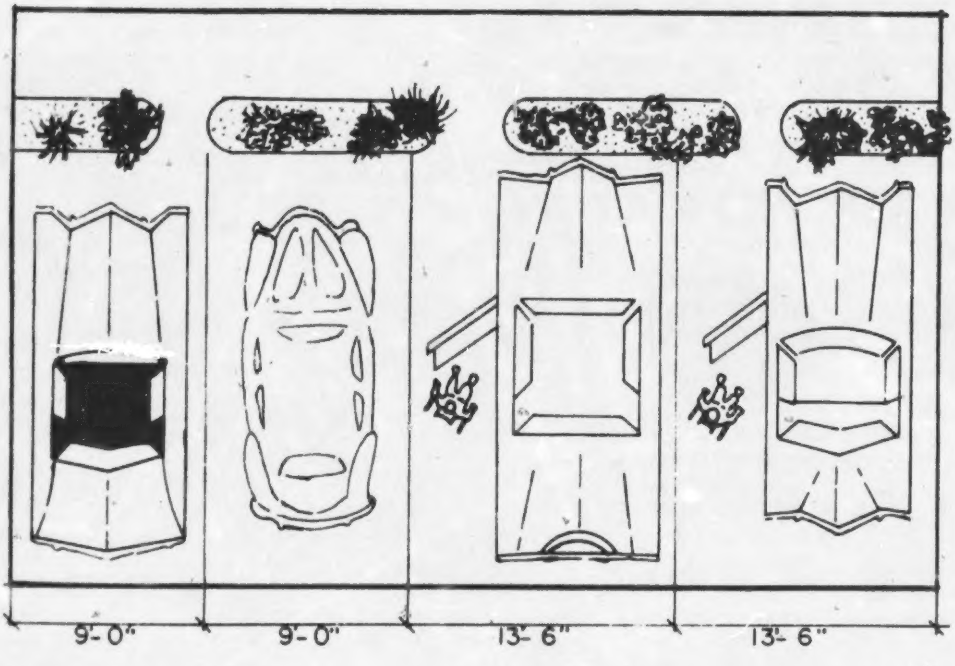
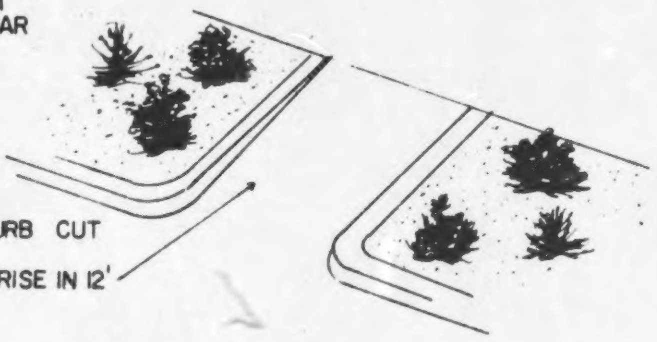
PARKING


9'-0"
9'-0"
13'-6"
13'-6"

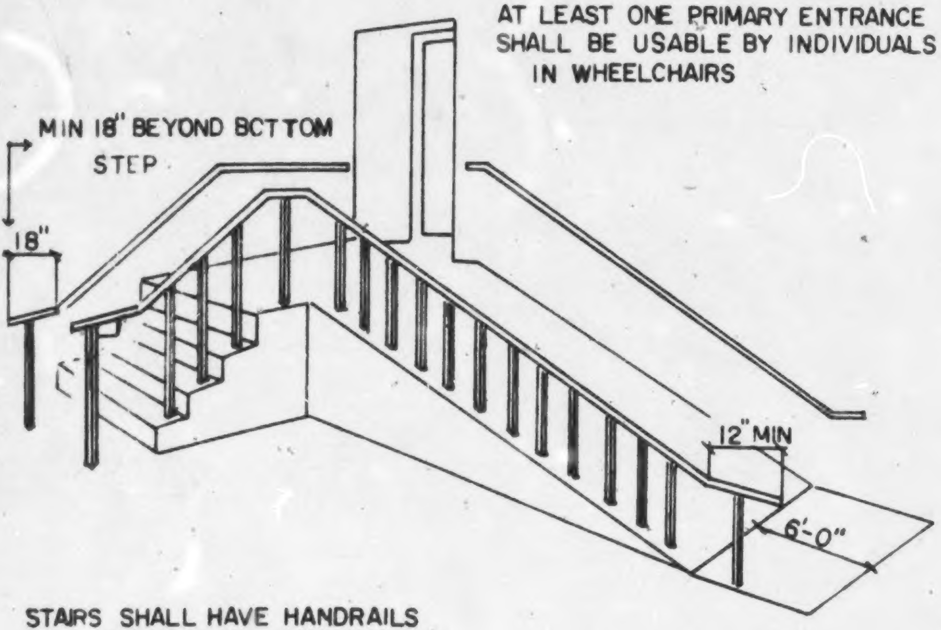
WHEELCHAIRS CANNOT FIT BETWEEN REGULAR CAR SPACES



CURB CUT

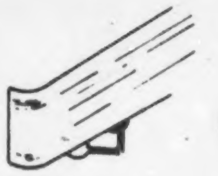
SLOPE = 1' RISE IN 12'

STAIRS AND ENTRANCES


MIN 18" BEYOND BOTTOM
STEP
18"
12" MIN
6'-0"

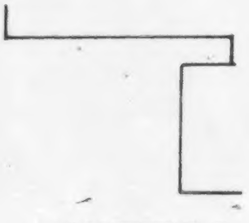
AT LEAST ONE PRIMARY ENTRANCE SHALL BE USABLE BY INDIVIDUALS IN WHEELCHAIRS

STAIRS SHALL HAVE HANDRAILS 32" HIGH MEASURED FROM THE TREAD AT THE FACE OF THE RISER

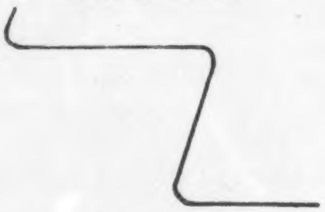


SMOOTH SURFACE HANDRAIL

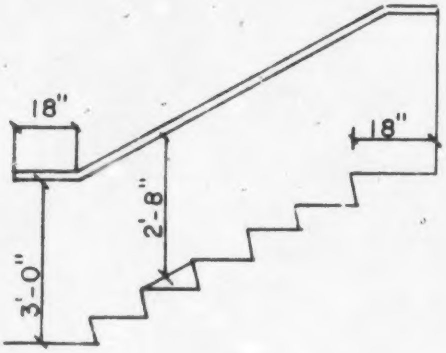
MOUNTING BRACKET AT LOWER SIDE OF HANDRAIL



UNACCEPTABLE

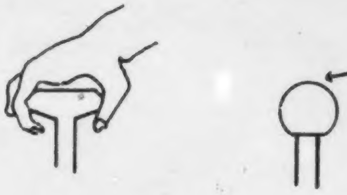


ACCEPTABLE



HANDRAILS

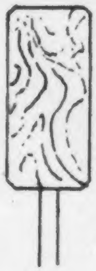
HANDRAILS MUST BE EASY TO GRIP

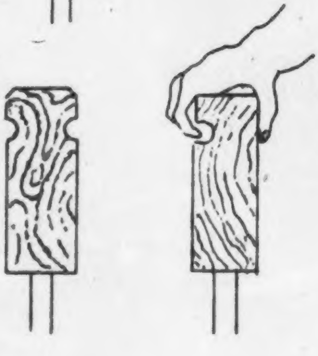


1 3/4" TO 2" DIAMETER

RAILS MORE THAN 2" DEEP OR 2 1/4" WIDE ARE DIFFICULT TO GRIP

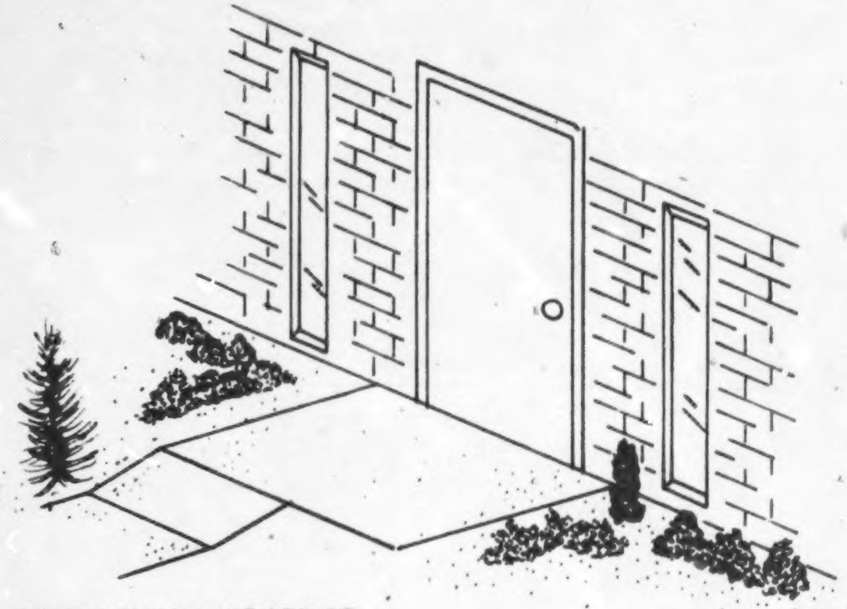
PLANE RECTANGULAR RAILINGS DO NOT PERMIT A SECURE GRIP





GROOVED FOR BETTER GRIP

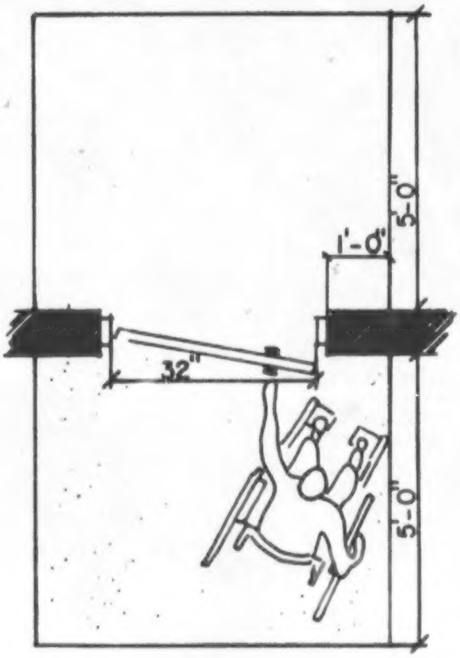
DOOR AND DOORWAYS



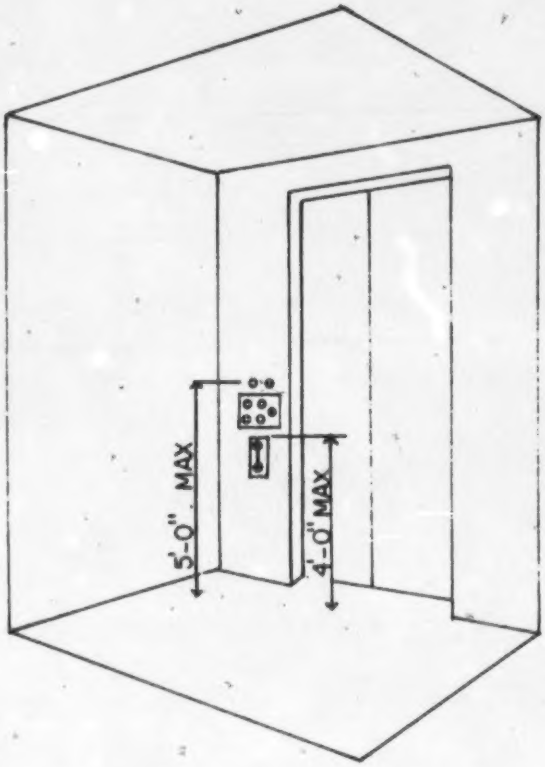
SHARP INCLINES AND ABRUPT CHANGES IN LEVEL SHALL BE AVOIDED AT DOORSILL

DOORS SHALL HAVE A CLEAR OPENING OF NO LESS THAN 32"

THE FLOOR SHALL BE LEVEL FOR A DISTANCE OF 5' ON THE INSIDE AND OUTSIDE OF THE DOORWAY



ELEVATORS AND TELEPHONES

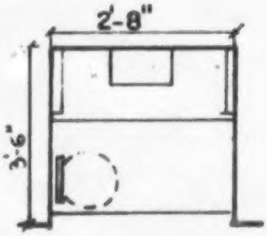


ELEVATORS SHALL BE ACCESSIBLE TO HANDICAPPED PERSONS ON THE FLOOR THEY USE TO ENTER BUILDINGS

SWITCHES AND CONTROLS SHALL BE PLACED WITHIN REACH OF INDIVIDUALS IN WHEELCHAIRS

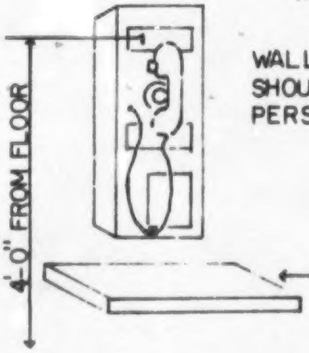
TELEPHONES SHOULD BE PLACED NO MORE THAN 4'-0" FROM THE FLOOR TO DIAL, RECEIVER OR COIN-SLOT FOR THOSE IN WHEELCHAIRS

PUBLIC TELEPHONES



PLAN

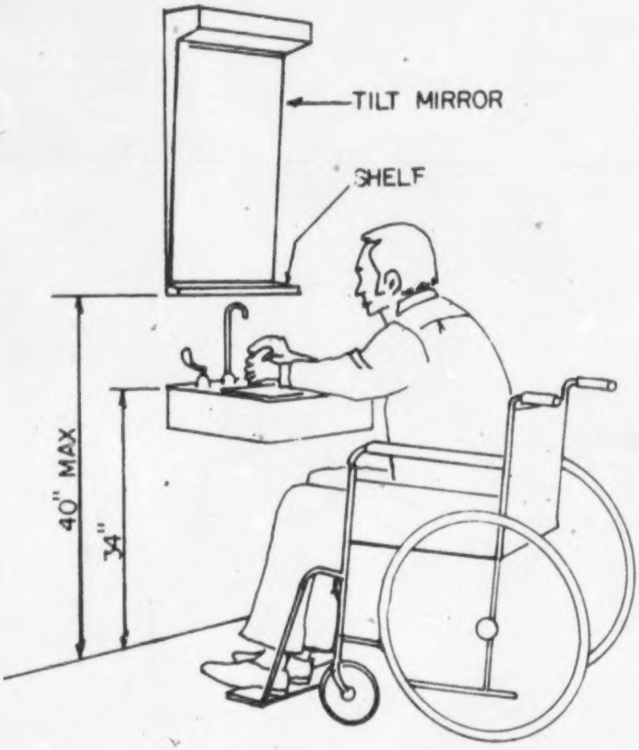
MINIMUM SIZE TELEPHONE BOOTH



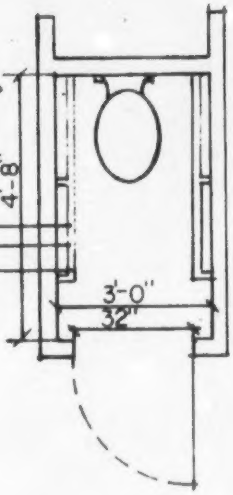
WALL MOUNTED PHONES SHOULD HAVE SHELVES FOR PERSONS IN WHEELCHAIRS

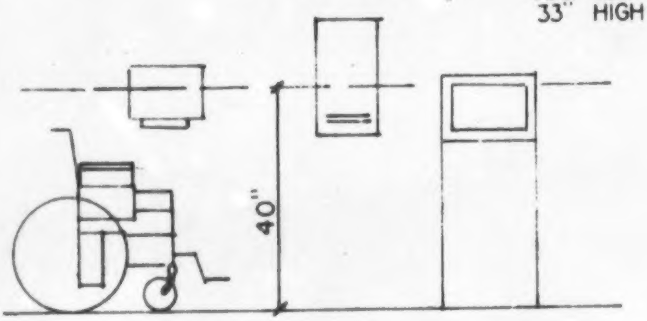
SHELF SHOULD BE 2'-6" ABOVE FLOOR

TOILET ROOMS

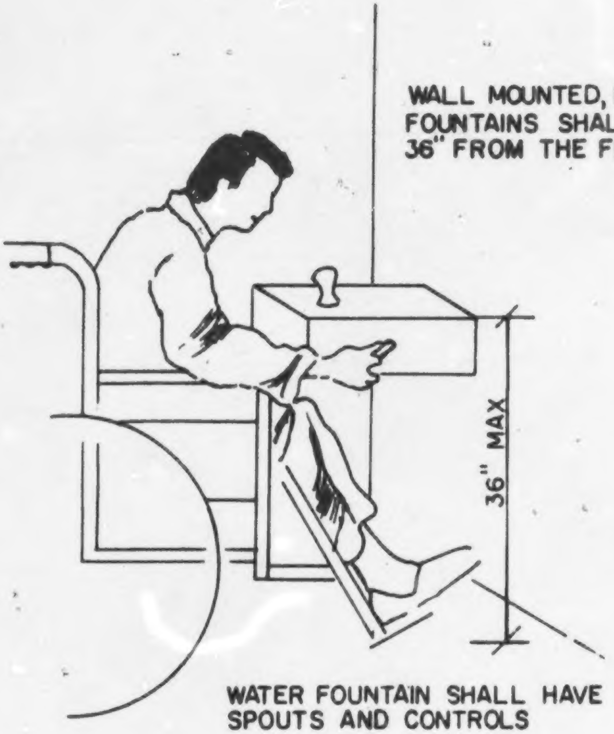

TILT MIRROR
SHELF
40" MAX
34"

TOILET ROOMS SHALL HAVE AT LEAST ONE STALL THAT FOLLOWS REQUIREMENTS SHOWN IN STALL "A"


STALL "A"
4'-8"
1 1/2" DIA
1 1/2" CLEAR
33" HIGH
3'-0"
32"

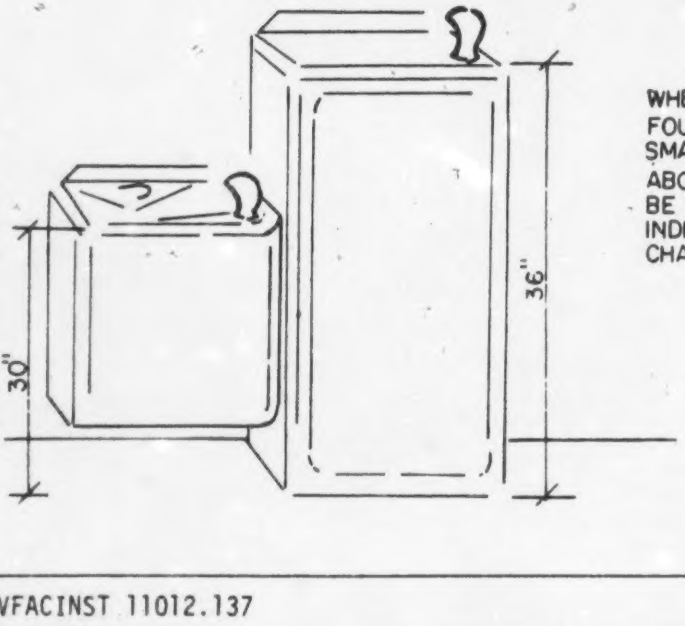


WATER FOUNTAINS



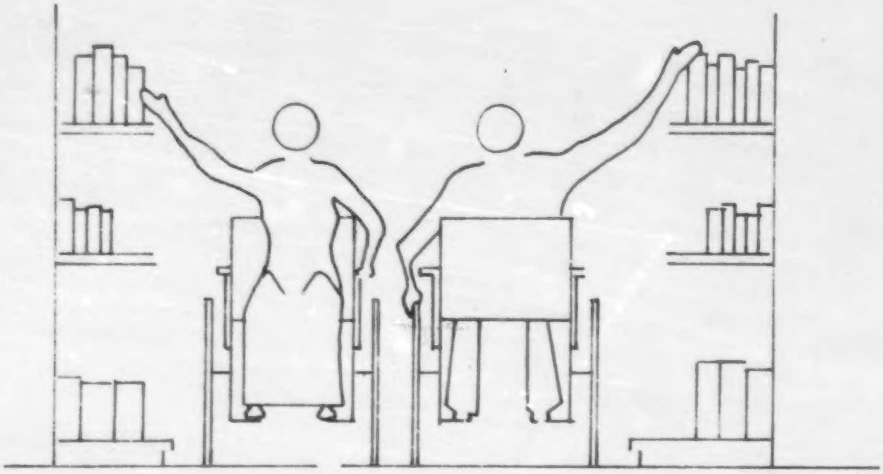
WALL MOUNTED, HAND-OPERATED FOUNTAINS SHALL BE MOUNTED 36" FROM THE FLOOR

WATER FOUNTAIN SHALL HAVE UPFRONT SPOUTS AND CONTROLS



WHEN FLOOR MOUNTED FOUNTAINS ARE USED A SMALL FOUNTAIN 30" ABOVE FLOOR SHOULD BE PROVIDED FOR INDIVIDUALS IN WHEELCHAIRS

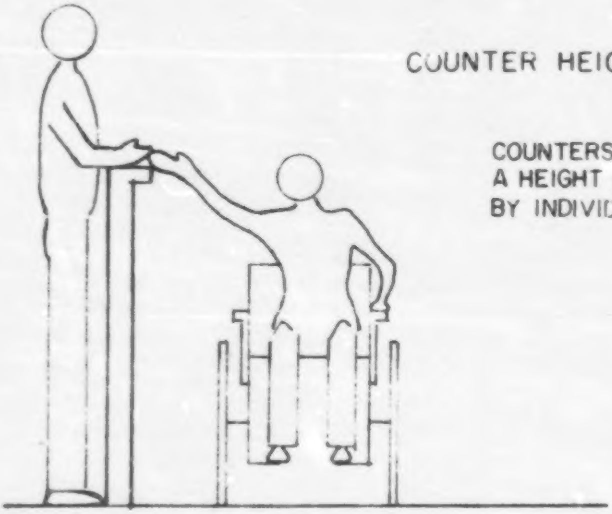
AISLE WIDTHS



AISLE WIDTH FOR TWO WHEELCHAIRS 5'-0" MIN 6'-0" PREFERRED

AISLE WIDTH FOR ONE WHEELCHAIR 3'-6" MIN 4'-0" PREFERRED

COUNTER HEIGHTS



COUNTERS SHOULD NOT EXCEED A HEIGHT OF 4' TO BE USABLE BY INDIVIDUALS IN WHEELCHAIRS

Section 4

FACILITY DESIGN AND CONSTRUCTION CRITERIA FOR DESIGN FEATURES TO MAKE BUILDINGS AND FACILITIES ACCESSIBLE TO AND USABLE BY THE PHYSICALLY HANDICAPPED

This manual prescribes criteria for design features to make buildings and facilities accessible to and usable by the physically handicapped. It implements DOD Instruction 4270.1, 17 November 1967.

1. *General Information.* Increasing numbers of physically handicapped persons are being employed by industry as sales representatives, consultants, and advisors. Many physically handicapped civilian specialists and professional persons are being employed by the Government. Military structures therefore will be designed to facilitate access for all persons with a legitimate reason for entry into or use of the structures and facilities. Most administrative, fallout shelter, educational, entertainment, and religious facilities and air terminals constructed for the Air Force are likely to be used by the physically handicapped.

2. *Criteria.* The provisions for physically handicapped persons will conform to the criteria in the United States of America Standards Institute (USASI) Standard A117.1-1961. "Specification for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped," subject to the exceptions in paragraph 3. Copies of the specification can be obtained from United States of America Standards Institute, 10 East 40th St. New York NY 10016.

3. *Exceptions:*

a. *Elevators.* Unless otherwise required or permitted for a particular structure, passenger elevators will not be provided for structures less than four stories high, including basements directly accessible from grade. Where permitted or required in multiple-story buildings–*for example,* medical facilities–elevators will conform to the requirements of USASI Standard A117.1–1961, section 5.9.

b. *Excluded structures–Military Construction.* The criteria will not be applied in the design of barracks, bachelor officer quarters, operational structures not open to civilians, buildings where the employment of physically handicapped person is not permitted because of a hazardous activity or facilities in remote and inaccessible locations.

c. *Cost Limitations.* The criteria will not be applied where their application would cause the cost of the facility to exceed the limitations established in legislation or departmental action a simplemented by AFP 88–16.

Application to Military Construction. For counties considered to be applicable under paragraphs 1 and 3, the criteria will have routine application as explained in AFP 88-009-1 (C1), the Introduction, 30 September 1968.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

J. P. McCONNELL, General, USAF
Chief of Staff

JOHN F. RASH, Colonel, USAF
Director of Administration

Summary of Revised, Deleted, or Added Material

This revision adds fallout shelter and air terminal facilities to the list of military structures requiring access and use by the physically handicapped (para 1). It generally updates the entire text.

Section 5

RECOMMENDATIONS TO THE SECRETARY, DOD, BY THE COMPTROLLER GENERAL, AND THE DOD RESPONSE REGARDING "FURTHER ACTION NEEDED TO MAKE ALL PUBLIC BUILDINGS ACCESSIBLE TO THE PHYSICALLY HANDICAPPED"

Recommendation 1: That the Secretary "modify and amplify the ANSI standard in the Construction Criteria Manual, DoD 4270.1-M to make it more adaptable to applicable military buildings."

DoD Comment: Concur. A revision of DoD 4270.1-M is now in preparation. We have asked the staff of the Architectural and Transportation Barriers Compliance Board (ATBCB) to recommend to us criteria for making auditoriums (theaters, chapels, etc.) accessible to and usable by the handicapped since this problem is not addressed in the ANSI standard and has been identified as a deficiency in military building design. It is intended that insofar as possible the recommendation of the ATBCB staff in this regard will be included in DoD 4270.1-M. The DoD does not intend to undertake to develop new criteria on its own since such an effort would duplicate the current work of the Building Research Advisory Board (BRAB) of the National Academy of Sciences. In June the BRAB received a contract from DHEW sponsored by the ATBCB to specifically identify accessibility problems of the various Federal Agencies and to recommend solutions. The DoD, as a member of the ATBCB, will be a direct recipient and beneficiary of the results of the BRAB effort. It is intended that the applicable results of this contract will be incorporated into DoD criteria.

Recommendation 2: That the Secretary "clarify the Manual to clearly identify those buildings that should comply with the Act."

DoD Comments: Concur. The following proposed language has been prepared for the draft of the Revised DoD 4270.1-M. Although minor changes may be incorporated prior to publication, the new version will read substantially as follows:

"All facilities which are open to the public, or to limited segments of the public, or which may be visited by the public in the conduct of normal business shall be designed and constructed to be accessible to the handicapped. All morale, welfare and recreational facilities, including non-appropriated fund facilities available to dependents or retirees shall be so designed. All hospitals and facilities for the care and rehabilitation of the sick and/or injured shall be so designed. All manufacturing facilities, administrative facilities, educational facilities or any other facilities where civilian workers may be employed including facilities constructed under other than Military Construction Authorizations and including contractor-owned facilities where the Department of Defense is funding all or any part of such construction shall be so designed. In fact, every facility should be designed to assure access to the handicapped unless its intended use is restricted to able bodied military personnel or unless it can be positively stated that its function is such as to make it hazardous to handicapped individuals. Examples of facilities where access to the handicapped is not required are barracks, BOQs, closed messes, or vehicle and aircraft maintenance facilities where all work is performed by able bodied military personnel. Inclusion of handicapped design features should be considered even for these facilities wherever feasible. In the case of family housing, modification of individual units as necessary should be accomplished on an individual unit basis when a requirement is identified. Whenever a question exists as to whether or not accessibility to the handicapped should be included, the answer should usually be affirmative. The DASD(I&H) may be queried on this matter if doubts exists."

Recommendation 3: That the Secretary "require the Secretaries of the Military Services to indicate in design instructions and in DD Form 1391, whether buildings in a particular construction project should be accessible to the physically handicapped."

DoD Comments: Concur. The FY 1977 Military Construction Program has been substantially prepared at this time and revision of all DD Forms 1391 does not appear practical. Beginning with the FY 1978 program a statement regarding accessibility will be required on all appropriate DD Forms 1391 (some Forms 1391 cover obviously inappropriate items such as aircraft runways, utility lines, land, etc.). The Armed Services are now including accessibility in design instructions. To assure continuance of this practice, a requirement that a specific statement on accessibility be included in design instruction will be added to DoD 4270.1-M.

Recommendation 4: That the Secretary "establish appropriate controls over the design of buildings to insure compliance with standards prescribed to eliminate barriers."

DoD Comments: Concur. It is considered that several recent events, the report of the GAO among them, will go far to assure compliance. Other events such as making the DoD a member of the ATBCB and providing a permanent staff to the ATBCB in the Rehabilitation Act Amendments of 1974 will also have a positive effect. The revision of DoD 4270.1-M and the added emphasis provided by the Army's revised Regulation, ER-1110-1-102 "Design Features to Make Buildings and Facilities Accessible to and Usable by the Physically Handicapped"; the Navy's Instruction 11012.137 "Design for Accessibility of Physically Handicapped Presons"; and Air Force Manuals 88-4 and 88-15 may well be sufficient in themselves to assure compliance. The DoD does not plan to establish any further specific compliance mechanism at this time pending expected action by the ATBCB to set guidelines for such mechanisms. In anticipation of such guidelines the following language has been drafted for inclusion in DoD 4270.1-M.

Assurance of Compliance: "It is highly likely that the DoD will be required to maintain an inventory of those facilities which are accessible to the handicapped. Therefore, the officials who are responsible for the technical adequacy of designs shall assure that the provisions of this section are carried out and that such action is recorded. For all new construction and substantial alteration projects a certification by such official stating that the project has met the requirements of this section, or if access to the handicapped was not included, the specific reasons why it was not will be maintained in the permanent project files."

Recommendation 5: That the Secretary "establish procedures for obtaining a waiver of the prescribed standard."

DoD Comments: Concur. A paragraph will be added to DoD 4270. 1-M requiring the approval of the Deputy Assistant Secretary of Defense (Installations and Housing) for waiver of the prescribed standards. It is anticipated that such waivers will be granted only in extraordinary circumstances.

Recommendation 6: That the Secretary "establish a survey and investigation system, as authorized by Section 6(2) of the act, to insure compliance with prescribed standards."

DoD Comments: Concur in the intent of the recommendation. However, there already exist within the Office of the Secretary of Defense and the Armed Services adequate organizations and mechanisms for the conduct of such surveys and investigations. These include Audit Agencies and Inspectors General. The Department of Defense will make use of these Agencies to perform such surveys and inspections as are required to insure compliance.

*U.S. GOVERNMENT PRINTING OFFICE 1977 241-205/5043(77) 1-3